

PLEASE NOTE THAT THE IAEA DOES NOT ACCEPT OR PUBLISH UNSOLICITED MATERIAL

IAEA STYLE MANUAL  
FOR PUBLICATIONS AND DOCUMENTS  
IN ENGLISH

2005 Edition



## **FOREWORD**

This updated version of the 1989 edition of the IAEA Style Manual for Publications and Documents in English is available on OASIS as well as in hard copy. It is expected that this manual will be used by Agency staff responsible for the compilation of manuscripts intended for publication, as well as by those preparing other documents. Originators of Agency publications and documents are, indeed, expected to take note of and adhere to the main principles of the Agency's publishing style as presented in this manual.



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## WRITTEN STYLE

1. It is important that Agency publications, records and other documents be written in language that is clear and without ambiguity.
2. With the exception of these opening remarks, the 'style' with which this manual is concerned is not the manner of expression used in the text but the set of conventions adopted at the Agency that determine the form in which the text is presented. There are numerous standard works on written style and English usage, and the following three, available in the IAEA Library, are particularly recommended:

H.W. FOWLER, A Dictionary of Modern English Usage

E. PARTRIDGE, Usage and Abusage

W. STRUNK, Jr., E.B. WHITE, The Elements of Style



# SPELLING

## I. GENERAL PRINCIPLES

1. The spelling given in The Concise Oxford Dictionary should be followed, except in official titles and direct quotations from printed material. Where alternative forms are given in The Concise Oxford Dictionary, the first version rather than a variant should normally be used. Examples are:

acknowledgement	focused
ageing	gram (and its derivatives)
analyse	grey
biased	judgement
disc (see also para. 5)	recognize
dispatch	routeing

2. Where the system of spelling used in other works of reference is different from that of The Concise Oxford Dictionary, the Oxford should prevail. The difference most frequently encountered in scientific terms is in the spelling of the Latin diphthongs, where The Concise Oxford Dictionary, in contrast to some other standard reference sources, uses *ae* and *oe*, e.g. in *haemophilia*, *caesium*, *palaeolithic* and *oedema*.

## II. SPECIFIC CASES

3. Verbs which can end in either *-ize* or *-ise* are to be spelled with *z*. Note that words like *analyse* and *surprise* do not come into this category.

4. The choice of indefinite article before an abbreviation is decided by the pronunciation of the abbreviation, e.g. a BWR, an FBR, a Euratom regulation. However, the indefinite article before a chemical element symbol is decided by the sound of the name of the element, e.g. a Si detector, a Au ring.

5. In computer terminology, *program* and *disk* are used instead of the normal spellings, *programme* and *disc*.

6. Dosimeter is the spelling used by the Agency; the version 'dose meter' never gained general acceptance.

7. *Geological*, *hydrological* are used instead of geologic, hydrologic.

8. Names of States and their capital cities should be spelled in accordance with the Agency's correspondence instructions (see also Chapter 17, Names and Titles).

9. The names of organizations should be spelled in accordance with standard reference sources (see Ch. 17, paras 12 and 13) and the Internet home page of the organization concerned.

10. Geographical names, other than those covered by para. 8, should be spelled according to the Index–Gazetteer of The Times Atlas of the World.

### III. FOREIGN WORDS

11. For foreign words which have been assimilated into English and which have alternative plural forms, the English form is normally to be preferred, e.g.:

formulas	<i>rather than</i>	formulae
forums	<i>rather than</i>	fora
oedemas	<i>rather than</i>	oedemata

However, in some cases the choice of plural form is governed by the particular sense in which the word is used:

antenna	antennae (of insects)
	antennas (of radios)
appendix	appendices (in books)
	appendixes (in bodies)
index	indices (in mathematics)
	indexes (in books)

12. Foreign words not assimilated into English should normally retain their original spelling in the plural also, e.g. Land and Länder. (Foreign words are not italicized — see para. 3 of Chapter 8, Italics, Bold Face, Underlining and Foreign Words.)

### IV. SPELLING CHECKER

13. Before a text is submitted for production, the electronic file should be subjected to a spelling program. The language should be set to 'English (United Kingdom)' or to 'British', ignoring those features (e.g. the preference for *-ise* verb endings) that conflict with the rules above.



# DIVISION OF WORDS AND EXPRESSIONS AT THE END OF A LINE

## I. DIVIDING WORDS

### *General principles*

1. Where possible, the part of the word at the end of the line should suggest the remainder of the word. No word should be divided in such a way that the letters preceding the hyphen form a sound that will mislead the reader. For example, *readjustment* should not be divided as read/justment, nor *legendary* as leg/endary, but rather as readjust/ment and legend/ary.
2. Words of five letters or less should not be divided.
3. A word should not be divided after one or two letters. With the exception of hyphenated words such as heat-up, a word should not be divided before one or two letters.
4. There should not be three or more consecutive lines ending with hyphens.
5. No paragraph should end with a divided word.
6. No page should end with the first part of a divided word.

### *Compound words*

7. Hyphenated words should be divided only at the hyphen:  
cross-/examine                                          under-/secretary
8. Non-hyphenated compound words that start with a combining form may be divided at the end of the combining form or alternatively in the second part of the word:  
micro/eco/nom/ics                                          radio/ac/tiv/ity

## II. DIVIDING EXPRESSIONS

### *Examples*

9. Expressions such as those given below should not be split at the end of a line (in Word, use a non-breaking space, inserted by pressing Ctrl + shift + space):

25 km	page 33 or p. 33
S.Fr. 100	Type II
100 euros	Ref. [3]
cobalt-60	phase A
Mr. N.W.A. Jones	$\alpha$ particle
No. 3	X ray

### *Numbers*

10. Numbers expressed in figures should not be divided, irrespective of length.

### ***Serial numbers of documents and publications***

11. The serial number of a report or document should not be separated from the preceding characters (although this may sometimes be unavoidable in bibliographical references). Do not separate:

INFCIRC/153(Corr.)

STI/PUB/944

### ***Dates***

12. The day should not be separated from the month, nor, as far as possible, the month from the year (in Word, use a non-breaking space, inserted by pressing Ctrl + shift + space).

### ***Enumerations***

13. When enumerated items ‘run on’ in the text are introduced by a letter or a number, the letter or number should not be separated from the word following it:

The following types of reactor are discussed: (a) experimental, (b) research, (c) power...

*not*

The following types of reactor are discussed: (a) experimental, (b) research, (c) power...

### ***Chemical formulas***

14. Simple chemical formulas should not be divided, irrespective of length. For example, do not divide  $\text{NaC}_{14}\text{H}_{29}\text{SO}$ .

15. Compound chemical formulas or structural formulas with linkage represented by single, double or triple points should not be divided but should, if necessary, be ‘displayed’ on a separate line. If a division is still required, it should be made after a linkage.

### ***Mathematical expressions***

16. A mathematical expression may be divided before the signs =, +, −, ×, etc.

# HYPHENS

## I. GENERAL PRINCIPLES

1. Hyphens should be reduced to a minimum, consistent with preventing ambiguity. A list showing the desired hyphenation or non-hyphenation of some words and expressions commonly encountered in the Agency's work is given in Section V.

2. One should distinguish between the use of hyphens (a) to denote a permanent bond, where the two words or elements will always be joined by a hyphen regardless of the context, and (b) to denote a temporary bond, where in another context the hyphen would not be required.

## II. PERMANENT HYPHENS

### *Prefixes and combining forms*

3. Most prefixes and combining forms should not be separated from the next word by a hyphen. Exceptions are as follows:

(a) When the prefix or combining form ends with a vowel and the next word begins with the same vowel or a 'y':

extra-articular	<i>but</i>	extraordinary
semi-infinite	<i>but</i>	semiofficial
multi-year	<i>but</i>	multielement
radio-osmosis	<i>but</i>	radioisotope

Exceptions are co-author, co-injection, cooperation, coordination, co-precipitation, microorganism.

(b) When the prefix is *non*, *self*, *quasi* or *ex* (in the sense of 'formerly'):

non-governmental	self-absorption	quasi-linear
------------------	-----------------	--------------

(c) When the prefix *pre* (*post*) is used to mean 'before (after) an event or period':

pre-ignition	pre-glacial	post-operational
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No hyphen is necessary when *pre* (*post*) indicates doing something in advance (afterwards):

preselect	pretreatment	postdated
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(d) When the next word begins with a capital:

sub-Saharan	inter-American
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(e) When a hyphen is necessary to prevent awkward or misleading juxtapositions of letters (e.g. 'cow' in the first example below) or to distinguish between pairs of similarly spelled words with different meanings:

co-worker	re-count (count again, as opposed to 'recount' — narrate)
un-ionized	re-form (form again, as opposed to 'reform' — cure)
	re-treat (treat again, as opposed to 'retreat' — go back)

**Other cases**

4. Where two words are combined in the sense of ‘and’ or ‘to’, the generally accepted form is with an en rule (see Section IV) as follows:

human–machine interface	<i>not</i>	human/machine
residue–biota	<i>not</i>	residue/biota

5. Terms that consist of a word modified by a single character preceding it should not be hyphenated, with the exception of chemical names:

	C dating	X ray	$\alpha$ particle
but	2-butene	$\beta$ -glucose	<i>m</i> -xylene

6. The hyphen is usually retained if the spelling without it would appear awkward (e.g. ‘shell-less’) or would suggest other words (cf. para. 3(e)), or to prevent an unfamiliar juxtaposition of words (e.g. ‘warehouse-like’).

**III. TEMPORARY HYPHENS**

7. In a compound epithet, the temporary hyphen is used to join together two or more words which would normally be written separately, in order to clarify what might otherwise be ambiguous. For example, ‘light-yellow powder’ has a different meaning from ‘light, yellow powder’. In ‘sugar-containing additives’ the hyphen is essential if additives that contain sugar are meant.

8. With adjectival expressions consisting of a number and a unit, no hyphen is necessary, e.g. ‘a five day workshop’, ‘a 5 MW reactor’. But note that ‘15 200-L drums’ is hyphenated to prevent misreading.

**IV. OTHER TYPESET RULES (‘DASHES’)****The en rule**

9. The en rule (inserted in Word by pressing Ctrl and the minus sign on the numeric keypad), which is typed without any adjacent spaces in ranges of numbers (see Chapter 6, Numerical Data, Section IV), is also used instead of the hyphen between words or terms that are connected in the sense of ‘and’ or ‘to’, i.e. where the first word or term does not qualify the second. Some examples are:

April–September 2002	residue–biota interactions
K–Ar dating	gas–liquid chromatography
Geiger–Müller counter	photomultiplier–light guide assembly
tin–lead alloy	IAEA–WHO cooperation
human–machine interface	London–Paris route
pressure–temperature curve	Late Cretaceous–Early Tertiary deposit

**The em rule**

10. The em rule (inserted in Word by pressing Alt + Ctrl and the minus sign on the numeric keypad) is longer than the en and is mainly used parenthetically with a space on either side:

Because of the large number of contractors involved — a consequence of the complexity of the project — responsibility for the failure cannot immediately be assigned.

## V. COMMONLY USED WORDS AND EXPRESSIONS FOR REFERENCE

11. As shown by the entries given in the following list, for Agency publications the temporary hyphen has been dropped from most compound epithets (e.g. in ‘low level waste’), and in several cases two words have been combined without the permanent hyphen (e.g. in ‘burnup’), owing to common usage. The forms of these words and expressions may therefore differ from those given in (or inferable from) the current edition of The Concise Oxford Dictionary.

$\alpha$ ray (noun and adj.)	C dating
$\beta$ -butadiene	car-borne
$\beta$ decay	cerebrospinal
$\gamma$ ray (noun and adj.)	charge exchange (noun and adj.)
2-D (two dimensional)	checklist
above ground (adj.)	cleanup
above mentioned	cogenerate
ad hoc (adj.)	co-injection
air-conditioning	collinear
airborne	cooldown
airflow	cooperation
airstream	coordination
airtight	co-precipitation
all-metal	cost–benefit
alpha bearing	cost effective
amino acid	covariant
architect–engineer	cross-reference
audiofrequency	cross-section
audiovisual	cut-off
back end (noun and adj.)	cutback
backfill	data processing (noun and adj.)
backfit	databank
backflow	database
backpressure	de-aeration
backscattering	debug
backup	decision maker
baseline	decision making (noun and adj.)
baseload	deep-sea water
beamline	Director General (IAEA)
benchmark	district heating (noun and adj.)
black body (noun and adj.)	dose equivalent
blowdown	double wall envelope
boiling water (noun and adj.)	downtime
bore water (noun)	drill hole (noun and adj.)
borehole	eigenfrequency
borewater (adj.)	eigenfunction
broadband	electron cyclotron (noun and adj.)
buildup	electronvolt
burnup	email
busbar	end-of-life (adj.)
by-product	end point
bypass	end use (noun and adj.)

fail-safe  
 fall-off  
 fallout  
 far infrared (noun and adj.)  
 feedback  
 feedstock  
 feedthrough  
 feedwater (noun and adj.)  
 finite difference method  
 firefighter  
 firefighting  
 first harmonic (noun and adj.)  
 flat-top  
 flow chart  
 flow path  
 flowmeter  
 flowsheet  
 fold-out  
 follow-up  
 footnote  
 free (as in 'gas free')  
 freeze-dry  
 fresh water (noun)  
 freshwater (adj.)  
 front end (noun and adj.)  
 fuel handling (noun and adj.)  
 fume hood  
  
 gamma emitting  
 gastroenteritic  
 glovebox  
 groundwater (noun and adj.)  
  
 half-life  
 halfway  
 heat generating  
 (but non-heat-generating)  
 heat-up  
 high level waste  
 human-machine interface  
 human-made  
 hydroelectric  
 hydropower  
  
 in-reactor (adj.)  
 in-service (adj.)  
 in situ  
 in vitro  
 in vivo  
 infrared  
 intergovernmental  
 intermediate level waste  
 interregional  
 ion acoustic  
 ion cyclotron (noun and adj.)  
 ion exchange resin  
  
 kilowatt-hour  
 know-how  
  
 laboratory scale (adj.)  
 large scale (adj.)  
 layout  
 leach resistant  
 leaktight  
 least squares (noun and adj.)  
 left hand (noun and adj.)  
 life cycle  
 lifespan  
 lifestyle  
 lifetime  
 light ion beam  
 light water reactor  
 line averaged  
 log book  
 log-normal  
 long lived  
 long term (adj.)  
 loss of coolant accident  
 low level waste  
 lower hybrid waves  
  
 macroeconomics  
 magnetic field (noun and adj.)  
 make-up  
 medium level waste  
 meltdown  
 microeconomics  
 microelement  
 microorganism  
 mid-1980s  
 midplane  
 mixed oxide fuel  
 mock-up  
 multielement  
 multipurpose  
 multiterm  
 multi-year  
  
 near field problem  
 near surface  
 neoclassical  
 neutral beam injection  
 newborn  
 non-cooperation  
 non-governmental  
 non-linear  
 north-east  
 nuclear weapon State  
 (but non-nuclear-weapon State)  
  
 off-gas  
 off-line

HYPHENS

off-site (but off the site)	salt water (noun)
offshore	saltwater (adj.)
ohmic heating	sea level
on-line	sea water (noun)
on-site (but on the site)	seabed
one dimensional	seawater (adj.)
one half (noun and adj.)	second harmonic (noun and adj.)
one third (noun and adj.)	Secretary-General (United Nations)
open pit (noun and adj.)	set point
overestimate	set-up
overvoltage	setback
part load (noun and adj.)	shallow ground disposal
path length	shelf life
peak load (noun and adj.)	shinethrough
per cent (but percentage)	short lived
person-hour	short term (noun and adj.)
petrochemical	shut down (predicative adj.)
photovoltaic	shutdown (noun and attributive adj.)
physicochemical	sideband
pick-up	single wall envelope
pinhole	site specific
plate-out	slowdown
policy maker	small diameter (adj.)
policy making (noun and adj.)	small scale (adj.)
poloidal field current	snowmelt
pond water (noun)	socioeconomic
pondwater (adj.)	solid state (noun and adj.)
pore water (noun)	south-east
porewater (adj.)	spent fuel storage
postdated	standby
postgraduate	starting point
post-operational	startup
preheat	state of the art (noun and adj.)
pre-ignition	steady state (noun and adj.)
pretreatment	(but non-steady-state (adj.))
printout	stress corrosion cracking
quasi-linear	stress-strain
radioactivity	subassembly
radiofrequency	subcommittee
radioisotope	subdivide
rainwater (noun and adj.)	subheading
ratemeter	sub-item
reactor-years	subparagraph
readout	sub-seabed
real time (noun and adj.)	subsoil
rearrange	subspecies
reclassification	substratum
remote controlled	surface water (noun and adj.)
remote handling (noun and adj.)	temperature dependent
reuse	textbook
right hand (noun and adj.)	thermohydraulic
runoff	thermomechanical

#### CHAPTER 4

thin film evaporator  
three body problem  
three quarters (noun and adj.)  
time dependent  
timescale  
tissue equivalent  
troubleshooting  
turbogenerator  
turnkey  
two dimensional (2-D)  
two thirds (noun and adj.)  
two week  
twofold  
type (as in 'PWR type')  
ultra-high-frequency (adj.)  
ultraviolet  
uncoordinated  
under way (not underway)  
underestimate  
  
viewpoint  
volume reduction techniques  
  
washout  
wastewater  
  
water-borne  
water cooled  
water table  
watertight  
waveform  
wavelength  
wavenumber  
web site  
weekend  
wet well (noun and adj.)  
whole body counting  
wideband  
word processing equipment  
workload  
workspace  
workstation  
worldwide (adj. and adv.)  
worth while (predicative adj.)  
worthwhile (attributive adj.)  
  
X ray  
  
yellow cake



# INITIAL CAPITAL LETTERS

## I. PROPER NAMES AND TITLES

1. Initial capitals are used for proper names (e.g. of accepted geographical units, geological ages, historical epochs and events, organizations and committees) and for the titles of laws, agreements, publications, etc. For example:

South Australia	<i>but</i>	southern Australia (not an accepted geographical unit)
the Second United Nations International Conference on the Peaceful Uses of Atomic Energy	<i>but</i>	the second Geneva conference
the Expanded Programme of Technical Assistance	<i>but</i>	the fellowship programme (informal title)
the Agreement Governing the Relationship between the United Nations and the Agency	<i>but</i>	the relationship agreement with the United Nations

**Note:** In the text of agreements, conventions, regulations and similar instruments with legal force it is customary to use an initial capital when referring to the instrument itself, e.g.:

Except where otherwise stipulated in these Statutes,...  
...hereby promulgate the following Rules...

## II. WORDS USED IN A SPECIALIZED OR RESTRICTED SENSE

2. (a) In Agency documents and publications, the words State (in the sense of political entity) and Member State (or Member) are always capitalized, irrespective of whether they refer to a particular (Member) State.
- (b) In internal documents, initial capitals are commonly given to words such as Department, Director, Division and Laboratory when they are short forms of Agency proper names or titles, irrespective of whether a particular Division, for example, has already been named in full in the text.
- (c) In publications, short forms of proper names and titles, including those mentioned in (b), are not normally given initial capitals. For example:

the Expanded Programme of Technical Assistance	<i>but</i>	the programme
papers presented at the Symposium on Nuclear Material Safeguards	<i>but</i>	papers presented at this symposium

**Note:** Other short forms of Agency proper names are given in para. 17 of Chapter 17, Names and Titles.

3. Government (in the sense of executive authority) is capitalized when used as an adjective or a substantive where a specific government is understood, but not normally when used in a general sense.

### III. PUBLICATIONS AND THEIR DIVISIONS

4. Certain words take an initial capital when used in a specific sense but not when used generically:

this Technical Report	<i>but</i>	this report (manual, guidebook, document)
in Paper No. ...	<i>but</i>	the paper on...
in these Proceedings	<i>but</i>	in earlier proceedings

5. Names of divisions within publications (e.g. Part, Chapter, Section, Article, Rule, Appendix, Annex and their plural forms) are capitalized only where they are followed by a numeral or capital letter, or when there is only one such division; divisions in publications other than the citing publication are not capitalized. For example:

The draft resolution in Annex A

The draft resolution in the Annex

The draft resolutions in the annexes

He welcomed the publication of Volume 1 of the Directory of Reactors and hoped the second volume would follow shortly.

The criterion given in section 4.1 of annex III of the ICRP publication

Table, figure and reference (and their plural forms) are capitalized only when followed by a numeral or capital letter and only in reference to the citing publication. To avoid confusion when reference is made to another publication, the terms should be written out rather than abbreviated and should not be capitalized. For example:

See figure 2.3 and references [2.8–2.23] in chapter 2 of Ref. [4].

**Notes:** (1) For initial capitals in quotations, see Chapter 9.

(2) For initial capitals in bibliographical references, see Chapter 11.

### IV. SCIENTIFIC TERMINOLOGY

6. In general, words based on inventors' or discoverers' names and the registered trade designations of proprietary articles should be capitalized, e.g. Gaussian, Inconel, Laplacian, Maxwellian, Perspex, Pyrex, Teflon.

#### ***The elements***

7. Although the symbols for the chemical elements consist of a single capital letter or begin with a capital, initial capitals should not be used when the name is written out in full, e.g. <sup>90</sup>Sr but strontium-90.

#### ***Geological terms***

8. Names of geological eras, periods, epochs, series and episodes are capitalized:

Cenozoic era	Pliocene epoch
Tertiary period	Lower Jurassic period

## INITIAL CAPITAL LETTERS

The term Recent, when referring to a geological age, is capitalized (e.g. the Recent or Pleistocene glacial epochs) but not when used in a general sense.

**Note:** pre-Algonkian *but* Precambrian.

### ***Computer languages***

9. Names of computer languages should be written with only an initial capital, unless they consist of a mixture of letters and numbers or are unpronounceable.

**Note:** For initial capitals in taxonomical names (i.e. the classification of plants and animals by genus, species, etc.), see Chapter 8, Section III.



# NUMERICAL DATA

## I. WORDS OR FIGURES?

### **Cardinal numbers**

1. Cardinal numbers should be spelled out up to ten, but not thereafter, with the following exceptions:

(a) Numbers above ten should be spelled out:

(i) At the beginning of a sentence:

Ninety-nine times out of a hundred the test proved negative.

(ii) If they are round numbers of no scientific significance that are being used approximately and are not being used in comparisons or enumerations with exact numbers, and if spelling them out is not inconvenient:

More than three hundred experts from 74 countries took part.

More than 300 took part, compared with only 256 the previous year.

About 135 000 people were evacuated.

Almost fifty years have passed since the book first appeared.

The design lifetime is about 50 years.

(b) Ten and lower numbers should be written in figures:

(i) In series, comparisons and enumerations in which these numbers occur together with higher numbers:

There had been 178 cases of irradiation, 9 serious.

(ii) In dates, addresses and citations of page, section, volume and edition numbers, etc., e.g. Vol. 1, Section 3, page 7.

(iii) To express dimensions, weights and measures, etc., except where such numbers are used in a descriptive rather than a scientific context:

A three year study was carried out.

The visit to the reactor will take three hours.

*but*

The reactor was operated at 5 MW for 3 hours.

(iv) Whenever used in conjunction with a symbol or abbreviation:

US \$3 million                      5%

£5                                      8 kg

€2                                      10°C

**Note:** The symbol should be repeated only if its omission might lead to the expression being misunderstood.

£5–6 (£5–£6 is unnecessary)

*but*

3 m × 8 m (*not* 3 × 8 m)

2. If, according to para. 1, the number must be written in full, any unit or abbreviation following it must also be written in full.

### **Ordinal numbers**

3. Ordinal numbers should be spelled out up to ‘tenth’ and written in figures thereafter, except in referring to centuries:

The seventh line of para. 2

The 12th largest, in terms of generating capacity

The first half of the twenty-first century

## **II. NUMBERS OVER 999**

4. Numbers from 1000 to 9999 are written without a space or comma between the first and second digits except where used in conjunction with larger numbers in tables and figures, when a space, but no comma, is inserted. Numbers of five or more digits are blocked off in groups of three with (non-breaking) spaces (inserted in Word by pressing Ctrl + shift + space) instead of commas (e.g. 10 000; US \$500 300; 5 843 295).

### **Billion, trillion**

5. In Agency materials, billion is used to mean a thousand million ( $10^9$ ) and trillion to mean a million million ( $10^{12}$ ). These need not be defined unless there is a real danger of ambiguity.

## **III. DECIMALS**

6. In English, decimals are indicated by a point and not, as in certain other languages, by a comma. Care must therefore be taken in using material originally prepared in other languages. Where the number is less than unity, the decimal point must be preceded by 0, e.g. 0.8 cm. A zero should not be added to the right hand end of a decimal fraction just to ensure that all the decimal fractions in a series or table have the same number of digits after the point, since the addition of a final zero would imply a greater degree of precision than is warranted. Neither should a zero in the last place be deleted. Decimals are blocked off in groups of three with non-breaking spaces (see para. 4), starting from the decimal point, e.g. 7.810 38.

7. To avoid confusion with decimal points, the multiplication sign (×, typed in Word by clicking on Insert: Symbol: Symbols and then choosing the font called “Symbol”: the multiplication sign is in the sixth row) should be used in arithmetical expressions rather than the raised point:

$25 \times 10^6$  (*not*  $25 \cdot 10^6$ )

## **IV. RANGES OF VALUES**

8. An en rule (see Chapter 4, Hyphens, Section IV) used to denote ‘from’ one number ‘to’ another should in all cases be typed immediately adjoining the preceding and following figures or symbols, without intermediate space:

NUMERICAL DATA

3–5 MW

1982–2005

75–80%

paras 53–59

3000–5000 or  $(3-5) \times 10^3$  (*not* 3–5000 or  $3-5 \times 10^3$  unless the lower limit is 3)

9. The two systems, that using an en rule and that using words, should not be mixed:

from 10 to 20 April

*not*

from 10–20 April

between 15 and 20 times

*not*

between 15–20 times





# HEADINGS, SUBHEADINGS AND ENUMERATION

## I. HEADINGS AND SUBHEADINGS

1. Headings and subheadings are numbered to facilitate reference, and should be typed as follows:

(a) A paper for the Proceedings Series:

(b) A manuscript for the Technical Reports Series, IAEA Safety Standards Series, etc.:

1. INTRODUCTION

**1. INTRODUCTION**

**1.1. Brief history**

1.1. BRIEF HISTORY

*1.1.1. The early days*

**1.1.1. The early days**

1.1.1.1. First steps

*1.1.1.1. First steps*

The scheme adopted should be as simple as possible and consistently applied throughout the document. In many straightforward documents it is not necessary to number subheadings, and there is rarely need to number paragraphs (except in the IAEA Safety Standards Series). (See also Chapter IX of the Editors' Supplement to the Style Manual.)

2. The 'decimal' system is convenient when there are several orders of subheadings in addition to the main headings. This system can be extended to the numbering of paragraphs if necessary (e.g. in the IAEA Safety Standards Series, where there are frequent cross-references). The final digit in a decimal classification is followed by a full stop when preceding the heading or text to which it refers, but not when mentioned in the body of the text (e.g. "As indicated in Section 4.3 above...").

3. A standard order of precedence has developed for numbering the various divisions of a manuscript. I, II, III,... and A, B, C,... should be reserved for major divisions such as parts (see Chapter IX of the Editors' Supplement), appendices and annexes (see Section III below). Chapters and sections should be numbered 1, 2, 3,... and subsection numbers decimalized, as illustrated in para. 1 above.

4. Headings for subsections and subparagraphs of lower order than those shown in para. 1 should be numbered, at increasingly small levels of division, as (a), (b), (c),... and then (i), (ii), (iii),... Even lower orders of heading should be preceded by a dash (—) or a bullet (•).

*Example 1**Headings for a Technical Report***4. ORGANIC CHEMISTRY**

## 4.1. HYDROCARBONS

**4.1.5. Ethylene***4.1.5.1. Preparation of ethylene**4.1.5.2. Properties and reactions of ethylene*

- (a) Physical properties
- (b) Chemical reactions
  - (i) Combustion
  - (ii) Additional reactions
    - With chlorine or bromine
    - With hydrogen iodide

5. As an alternative to (a), (b), (c),... one might use (1), (2), (3),... to number headings, but this is not recommended where confusion might arise with other, similarly numbered items, such as equations, to which reference is made.

**II. ENUMERATION IN THE TEXT**

6. It should first be decided whether a group of items should be (a) displayed as a list or (b) simply run on in the text, requiring no greater emphasis.

7. The component elements of a displayed list are normally identified by lower case letters (or Arabic numerals), lower case Roman numerals and dashes/bullets, in the same order of precedence as given in para. 4 above.

*Example 2*

To allow an extensive examination of dose reduction possibilities it is necessary to record and analyse a wide spectrum of data and information. The following factors are of interest:

- (a) The long term development of variables affecting the dose;
- (b) The boundary conditions under which the doses are received;
- (c) How the doses received are affected by time, place and specific aspects of the work;
- (d) The allocation of the dose received to individual steps of some significant work processes.

The method allowing for all these factors is based on four investigation procedures.

*Example 3*

- (a) If any part of the material escapes from the containment system under the conditions of para. 607:
  - (i) The most reactive configuration and moderation foreseeable under the conditions of para. 607;
  - (ii) Close full water reflection of the containment system or such greater reflection of the containment system as may additionally be required;
  - (iii) The most reactive configuration and moderation considered credible;
  - (iv) Close full water reflection of the material.
- (b) Water can leak into or out of all void spaces of the package, including those within the containment system.

**Note:** Indented lower case Roman numerals are aligned to the right.

*Example 4*

Various types of cavity in geological formations are of potential interest for the purpose of disposal of solid low and intermediate level radioactive waste:

- (a) Specially excavated cavities, which can be developed in different geological formations at various depths. Of interest here are:
  - (i) Suitable mining methods, which include:
    - Drilling and blasting;
    - Machine tunnelling;
    - A combination of the above methods;
    - Solution.
  - (ii) The advantages of specially excavated cavities over natural caves and disused mines, including:
    - Flexibility in design (choice of depth, orientation, size and shape);
    - Increased probability that no unknown boreholes exist;
    - Absence of ore bodies;
    - No unnecessary shafts, tunnels, vaults or caverns.
  - (iii) Possible disadvantages:
    - Lack of suitable workforce and accompanying infrastructure;
    - Need for in situ information on the geotechnical and hydrogeological properties of the repository.
- (b) Disused mines and other cavities, which were used for exploitation of ores or for different civil purposes.
- (c) Natural cavities, which are generally wet or have an aesthetic value, or are protected as natural phenomena.

8. (1), (2), (3),... should not normally be used to number the elements of a list unless there is a special reason to do so, for example to help distinguish between two sets of enumerated items in the same section of a document.

*Example 5*

In accordance with the requirements for starting the project, the following operations have been carried out within the framework of preparatory activities:

- (a) Defining the main steps of the technological process;
- (b) Purchasing equipment and materials for immediate needs;
- (c) Defining the necessary equipment and establishing detailed technical specifications;
- (d) Preparing the working halls;
- (e) Installing and commissioning the main and auxiliary equipment for immediate needs;
- (f) Setting up the detailed experimental programme.

Most of the preparatory activities were carried out during 1992 and then the peak activities followed, among which the most important were:

- (1) Purchase of equipment and expendable materials to be used in the framework of the project;
- (2) Layout and commissioning of equipment;
- (3) Research work for establishing detailed procedures for every step of the flowsheet, determining the optimal parameters characteristic of the technological process, and defining the specifications of the products resulting from each of these steps;
- (4) Setting up of control methods for every phase and for intermediate products.

*Example 6*

This paper describes the status of the programme in terms of five phases that will lead to the issuance of a licence for receipt and emplacement of wastes in a geological repository by 1998:

- (1) Recommendation of sites for characterization;
- (2) Characterization of sites;
- (3) Selection and approval of one site for development as a geological repository;
- (4) Licensing and construction authorization for the approved site;
- (5) Construction and performance confirmation testing for the geological repository.

Concerning Phase 1, among the first steps in recommending a site for characterization, the USDOE...

9. Where items are listed in a column but it is not necessary to identify the individual items by different letters or numbers, for example where the list is purely illustrative, each item may be preceded by a dash (or bullet).

*Example 7*

The influencing factors examined in this context include:

- General area dose rate conditions in the plant;
- Composition of the radiation fields as determined by  $\gamma$  spectrometry;
- Contamination of the work locations;
- Existing fuel damage.

*Example 8*

and the equipment required for the experiment is as follows:

- One spade;
- One wooden box;
- Two pieces of string;
- Five HEPA filters;
- One lemon.

*Example 9*

The analytic solutions to the equations for the model used are:

$$C = Q(\pi r_s)^{-1}(K_H K_V)^{-1/2} C' \quad (17)$$

where

- $C$  is the concentration of the radionuclide (Bq/m<sup>3</sup>);  
 $Q$  is the rate of release of the radionuclide into the ocean (Bq/s);  
 $r_s$  is the radius of the source (m);  
 $K_H$  is the horizontal eddy diffusivity in the water column (m<sup>2</sup>/s);  
 $K_V$  is the vertical diffusivity in the water column (m<sup>2</sup>/s);

and  $C'$  is given by Eq. (15).

10. Each enumerated item should begin with a capital letter.
11. The punctuation at the end of an item in a list is usually a semicolon. If an item contains a complete sentence, then all the items in the sequence end with a full stop. The last item in any sequence also ends with a full stop.

### III. ENUMERATION IN APPENDICES AND ANNEXES

12. In a document that is simple in structure, tables, figures, equations, references and footnotes are numbered consecutively throughout all sections and appendices. In a longer, more complex document, it is advisable to number tables, figures, equations and references from 1 in each chapter and each appendix, using a decimalized system; for example, Table 5.2 would be the second table in Chapter 5. (See paras 5 and 6 of Chapter 14, Tables; para. 16 of Chapter 15, Figures; and para. 11 of Chapter 16, Mathematics.) In such a document, footnotes should also be numbered from 1 in each chapter and appendix, but the simple 1, 2, 3,... numbering system rather than a decimalized system should be followed.

13. Irrespective of whether a document is simple or complex in structure, in each annex the numbering of tables (figures, etc.) starts from 1 since, in contrast to an appendix, an annex is not an integral part of a document (see para. 1 of Chapter X, Appendices and Annexes, in the Editors' Supplement). Footnote numbering would also begin from 1 in each annex.

14. Below are some examples of typical numbering in the different cases.

## **Simple document**

### *Example 10*

*A simple document with only one appendix or annex*

#### **Appendix**

##### **OPTIMIZATION FOR POST-OPERATIONAL PHASE**

###### A.1. INTRODUCTION

Table 20, Fig. 32, Eq. (25), Ref. [78]

*(continuation of numbering from main text)*

#### **Annex**

##### **RELATIVITY THEORY**

###### A-1. INTRODUCTION

Table A-3, Fig. A-2, Eq. (A-4), Ref. [A-1]

### *Example 11*

*A simple document with more than one appendix or annex*

#### **Appendix I**

##### **INFCE SALT REPOSITORY**

###### I.1. INTRODUCTION

Table 20, Fig. 32, Eq. (25), Ref. [78]

*(continuation of numbering from main text)*

#### **Annex V**

##### **CONTAMINANTS IN LIQUID WASTE**

###### V-1. INTRODUCTION

Table V-3, Fig. V-2, Eq. (V-4), Ref. [V-1]

## **Complex document**

### *Example 12*

*A complex document with only one appendix or annex*

#### **Appendix**

##### **OPTIMIZATION FOR POST-OPERATIONAL PHASE**

###### A.1. INTRODUCTION

Table A.7, Fig. A.5, Eq. (A.10), Ref. [A.12]

#### **Annex**

##### **RELATIVITY THEORY**

###### A-1. INTRODUCTION

Table A-3, Fig. A-2, Eq. (A-4), Ref. [A-1]

### *Example 13*

*A complex document with more than one appendix or annex*

#### **Appendix I**

##### **INFCE SALT REPOSITORY**

###### I.1. INTRODUCTION

Table I.7, Fig. I.5, Eq. (I.10), Ref. [I.12]

#### **Annex V**

##### **CONTAMINANTS IN LIQUID WASTE**

###### V-1. INTRODUCTION

Table V-3, Fig. V-2, Eq. (V-4), Ref. [V-1]





# ITALICS, BOLD FACE, UNDERLINING AND FOREIGN WORDS

## I. KEY WORDS

1. Key words or phrases to which particular attention is to be drawn may, with discretion, be set in italics or in bold face. The same device may be used to indicate defined terms.
2. In manuscripts intended for publication, words underlined would normally be set in italics unless it is indicated that underlining is really intended. Quotations from resolutions of the IAEA Board of Governors or General Conference are a special case where underlining must be retained.

## II. FOREIGN WORDS

3. Foreign words (other than taxonomical names) should not be italicized or underlined, even if they have not been assimilated into English. Where it is considered essential to indicate that a foreign word is being used, for example because its meaning will not be known to English readers, the first time the word is used it should be enclosed in single quotation marks and an English translation or paraphrase added in parentheses.

## III. TAXONOMICAL NAMES

4. The taxonomical names of divisions larger than genus (phylum, class, order and family) are written with initial capital letters but not italicized (or underlined), e.g. Leguminosae.
5. The name of the genus is italicized and written with an initial capital letter, e.g. *Smilodon*. After the first use the genus name can be abbreviated to an initial capital letter, also italicized; for example, *Populus tremuloides* can be followed by *P. deltoides*.
6. The name of the species (and subspecies, if any) is italicized but not capitalized, even when it is derived from the discoverer's name, e.g. *Lilium hansonii*, or when it is a proper adjective reflecting the location of the first specimens described, e.g. *Styrax californica*.
7. Certain English derivatives of names of genera and species, such as durum, sorghum, amoeba, mastodon and carnivore, have become so common that they are no longer italicized or capitalized when they stand alone. The Concise Oxford Dictionary should be consulted for such names.
8. Designations that follow italicized generic, specific or subspecific names are not italicized, e.g. *Viola* sp. (or spp.).
9. The names of varieties are usually not italicized, e.g. *Hordeum vulgare*, var. Himalaya.
10. The names of mutants, loci and genes are italicized.

11. The name of a taxonomist (e.g. Linnaeus) is capitalized but not italicized, and is often abbreviated:

*Quercus alba* L.

*Molossus coibensis* J.A. Allen

*Euchistenes hartii* (Thomas)

The parentheses in the last example signify that Thomas described the species *hartii* but referred it to a different genus.

#### **IV. TITLES OF PUBLISHED BOOKS AND JOURNALS**

12. Titles should not be italicized (or underlined) in bibliographical references. They may, however, be italicized (but not enclosed in quotation marks) in the text or in footnotes if written out in full, although initial capitals are normally sufficient.

# QUOTATIONS

## I. GENERAL PRINCIPLES

1. All quotations should correspond exactly to the original, not only in wording but also in spelling, punctuation, use of capital letters and italics, etc.

2. When part of the original text is omitted from within a quotation, the omitted word(s) should be replaced with *three* dots. Omission of one or more paragraphs or subparagraphs should be indicated by a separate, centred line of *seven* dots. If the first (or last) sentence of a quotation has its beginning (or end) omitted from the quotation, it is not necessary to mark this omission with three dots unless the sense would be altered without them:

The Agency's principal objective is "to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world."

but

They discussed Article VII.C: "The staff shall include..."

3. Words inserted in or added to a quotation should be enclosed in square brackets.

### ***Double or single quotation marks?***

4. Although the choice of double or single quotation marks may be considered a matter of taste, in Agency documents double quotation marks should be reserved for actual quotations and longer phrases. Upon first use of a word or short phrase to which attention is to be drawn, single quotation marks are preferred. Such a word or phrase may be written without them later in the same document. (See also para. 3 of Chapter 8 on foreign words.)

### ***Presentation***

5. As a rule, a quotation longer than three lines of text should be presented as a separate block, each line beginning on the same (paragraph) indent, and with a line space above and below the block.

6. All quotations should be placed between double quotation marks. When a quotation consists of several consecutive paragraphs, the quotation marks should be placed at the beginning of each paragraph, before each heading and at the end of the last paragraph; they should not, however, be inserted at the beginning of subparagraphs or indented enumerations.

## II. QUOTATIONS WITHIN QUOTATIONS

7. When a quotation occurs within a quotation, double quotation marks should be used for the outer and single quotation marks for the inner quotation. If there should be yet another quotation within the inner one, it should be enclosed in double quotation marks.

8. When a quotation within a quotation ends together with the original quotation, the quotation marks should be closed separately for each quotation, i.e. the single quotation mark should be followed by the double quotation marks.

### III. QUOTATIONS FROM TEXTS IN FOREIGN LANGUAGES

9. Normally, quotations from foreign languages should be translated into English, with “(translation from the [original language])” being inserted at the end of the quotation, after the quotation marks. If an official English translation already exists, it should be used.

### IV. PUNCTUATION

10. The final punctuation in a quotation should normally be set before the final quotation marks. Where a quotation ends with the end of a sentence, with an abbreviation having a final full stop, or with three dots (ellipsis), no additional full stop is necessary:

The questions keep recurring, “Why, and what could the Agency achieve by doing so?”

The committee agreed to carry out “general studies, area survey, site selection, etc.”

It was stated that “the Director General’s proposals had been drawn up in accordance with the principle of ‘best prevailing rates’.”

However, if a quotation ending with the end of a sentence is followed by a parenthetical comment, the full stop then follows the final parenthesis and does not precede the final quotation marks:

It was stated that “the Director General’s proposals had been drawn up in accordance with the principle of ‘best prevailing rates’” (see Ref. [11]).

11. If the original text quoted finishes with other than terminal punctuation (e.g. a comma or semicolon) but completes the sentence in which it is quoted, this punctuation should be replaced with a full stop after the closing quotation marks:

Article V.E.4 states that “The General Conference shall: ...Consider the annual report of the Board”.

12. Where a quotation is introduced by some such phrase as “the following provision” or “Article VI reads”, the opening quotation marks are preceded by a colon:

Article V.E.1 reads: “The General Conference shall: Elect members of the Board of Governors in accordance with article VI”.

### V. INITIAL CAPITAL LETTERS

13. In a quotation beginning with the first word of a sentence, this word should be written with an initial capital letter. When one or more words are omitted from the beginning of a sentence quoted, the first quoted word should be written with a lower case initial letter (see examples in para. 10).

### VI. FOOTNOTES RELATING TO QUOTATIONS

14. When a quotation contains a footnote which cannot be omitted, the footnote must be reproduced. The number of the footnote in the original quotation should be retained and the footnote inserted immediately beneath the quotation, and not at the bottom of the page. Final quotation marks should follow the footnote.

15. When an author wishes to comment in a footnote on a text he/she has quoted or give a reference to it, the footnote identification sign should be placed after the completed quotation, i.e. outside the quotation marks. The footnote itself should be inserted at the bottom of the page, as usual.

**Editors' Appendix  
to  
Chapter 9**

**QUOTATIONS**

***Editor's and translator's notes***

1. An editor's or translator's note to a quotation should be treated as a footnote and indicated by an asterisk. The footnote should begin with the indication *Editor's note:* or *Translator's note:* in italics.

***Accuracy of quotations***

2. It is the editor's responsibility to check the accuracy of quotations taken from Agency sources and other accessible material, and to verify that the presentation is not misleading.



# ABBREVIATIONS AND SYMBOLS

A Glossary of Abbreviations and Acronyms can be found on OASIS under About IAEA. An additional list, including symbols, appears at the end of this chapter.

## I. GENERAL PRINCIPLES

1. Abbreviations are used to save space and to avoid distracting the reader with the repeated spelling out of long words and phrases. Anything that would be unpleasing to the eye or puzzling if abbreviated should, however, be spelled out.

2. Some abbreviations are introduced purely for convenience in one particular document. These should not appear in the title and must be identified on first appearance in the text (and separately in the abstract if used there). This is best done by giving the words in full followed by the abbreviation in brackets. Initial capitals should not be used for the full words if they are not normally capitalized.

3. With abbreviations of a more general nature, a decision has to be made on the basis of experience and common sense whether they fall into class (a) or class (b) below:

(a) Abbreviations which the average reader of the text may not be expected to know. These should be treated as in para. 2 above.

(b) Abbreviations which the average reader of the text may be expected to know. These may be used in the title, text and abstract without explanation.

As an example, the abbreviation PWR would clearly fall into category (b) in a paper from a symposium on nuclear power reactors but would come under (a) in a biological article on marine pollution.

4. Names of organizations should be given in full when first mentioned, even though they may be well known by their abbreviations (with the exception of the IAEA in publications of which the Agency is the corporate author).

5. If a number of unfamiliar abbreviations are to be used extensively in a long document, it may be advisable to have a list of abbreviations at the end of the work, and to draw attention to this with a footnote to the first listed abbreviation that appears in the document, or by mentioning the list in the introduction to the document.

6. Where space is an important consideration in tables and figures, abbreviations should be extensively used, with explanations provided, if necessary, in a table footnote or at the end of a figure caption (see Chapter 14, Tables, and Chapter 15, Figures).

7. The plural of a fully capitalized abbreviation is formed by adding a lower case 's', e.g. a PWR, several PWRs (but not PWRS or PWR's).

## II. UNITS OF MEASUREMENT

8. Originators of Agency publications are obliged to use the International System of Units (SI). They are therefore responsible for ensuring that, for example, curies and rads are replaced by becquerels and grays, respectively (Appendix A lists SI units and symbols). If non-SI units are used in material prepared outside the Agency, it is the responsibility of the

Scientific Secretary to make the necessary conversions. If there is some reason for retaining the original, non-SI units, conversions should be indicated, for example by footnotes.

9. A list of general and scientific abbreviations and symbols commonly used in Agency publications is given at the end of this chapter.

10. Micron (micrometre) and cc (cubic centimetre) are not accepted in Agency documents. They must be written as  $\mu\text{m}$  and  $\text{cm}^3$ , respectively.

11. There should always be a space between a number and a unit (e.g. 16 mm), with the following important exceptions:

3M HCl	0.2N NaNO <sub>3</sub>	pH7
20%	4.2\$ (reactivity)	350%
28°C ( <i>but</i> 50 K)	10g (gravity — to distinguish from grams)	

Note also: wt%    vol.%    at.%

12. For simple combinations of units the solidus is preferred to the raised dot (e.g.  $\text{W}/\text{cm}^2$  rather than  $\text{W} \cdot \text{cm}^{-2}$ ), but for more complex combinations the raised dot should be used (e.g.  $\text{W} \cdot \text{cm}^{-2} \cdot \text{s}^{-1}$ , not  $\text{W}/\text{cm}^2/\text{s}^1$ ).

### III. SPECIFIC CASES

#### **Full stops**

13. Upper case abbreviations formed by combining the initials of words usually contain no full stops, but a common exception is P.O. Full stops should not be used in abbreviations of academic degrees (e.g. PhD).

14. A full stop is normally used at the end of an abbreviated word when the final letter of the abbreviation is not the same as the final letter of the complete word (e.g. Corp.). In most cases there should be no full stop at the end of an abbreviation when the final letter of the abbreviation is the same as the final letter of the complete word (e.g. Ltd). Thus there is no full stop after the plurals of the following:

Ref. [1]	<i>but</i>	Refs [1, 2]
Fig. 1	<i>but</i>	Figs 3 and 4
Vol. 1	<i>but</i>	Vols 7–9
Eq. (5)	<i>but</i>	Eqs (5, 6)

Note, however:

p. 1    pp. 1–9  
Mr., Ms., Dr., Jr., Messrs.

#### **Dates and times**

15. The names of the months are abbreviated as follows (May is not abbreviated):

Jan. Feb. Mar. Apr. Jun. Jul. Aug. Sep. Oct. Nov. Dec.

16. The abbreviations for the days of the week are:

Mon. Tues. Wed. Thurs. Fri. Sat. Sun.

However, in a figure or table where all the days of the week appear in sequence, they may be written: M T W T F S S.



17. Both the International Organization for Standardization (ISO) and Agency style require dates to be expressed as follows: 2004-04-16. Alternatively, the date should be written, if abbreviated, in the form: 16 Apr. 2004 (not Apr. 16, 2004).

18. A clear distinction should be made between forms using a.m. and p.m. (e.g. 9.30 a.m.) and the 24 hour system (e.g. 0930 or 09:30). The style should, of course, be consistent within a document.

19. For calendar dates and times, the ISO uses hyphens to separate year from month, month from day and day from hour; colons to separate hours from minutes and minutes from seconds; and the decimal point to separate seconds from parts of a second:

2002-11-21-12:16:30.5

for 21 November 2002 at 16 minutes and 30.5 seconds after 12 noon

**Note:** The word ‘o’clock’ should not be used to denote time.

### **Compass points**

20. Compass directions are abbreviated as follows:

N E S W NE SW NNW ESE

21. Geographical coordinates are given as follows:

52°33'05" N 13°21'10" E

### **Computer languages**

22. Names of computer languages should be written with only an initial capital, unless they consist of a mixture of letters and numbers or are unpronounceable, e.g. Visual Basic but PL2.

### **Units of currency**

23. If a currency abbreviation consists of a short form of the currency name, a space separates the figure from the abbreviation:

R 70 Y 90

There is no space when the abbreviation consists of a symbol or a combination of letter(s) and symbol:

50¢ US \$250 000 \$A5 €10 £5

The (capitalized) forms of currency abbreviations in The Concise Oxford Dictionary (where given) are preferred to those listed in the Terminology Bulletin issued by the United Nations.

### **The elements**

24. A list of the symbols of the elements is given in Appendix B. Note that the forms A (argon) and J (iodine) should not be used (use Ar and I). D is commonly used for deuterium and T for tritium. Whether “a” or “an” precedes an element symbol in a sentence is determined by the pronunciation of the name of the element, e.g. a Au target (read as “a gold target”).

### **Mass number**

25. The mass number (along with indication of the metastable state where this is relevant) should be written at the top left of the element symbol, with the ionic state at the top right, e.g.  $^{238}\text{U}$ ,  $^{80\text{m}}\text{Br}$ ,  $^{59}\text{Fe}^{3+}$ . However, in tables the forms U-238 and Br-80m are recommended. At the start of a sentence the element name should be written in full (e.g. Uranium-238).

**Nuclear reactions**

26. Nuclear reactions may be written in various forms, for example  $^{14}\text{N}(\alpha, \text{p})^{17}\text{O}$ ,  $(\text{n}, \alpha)$  or the equation form, often used when energies are to be indicated:

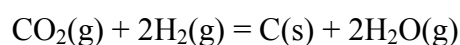
**Chemical state symbols**

27. When an abbreviation is given after a chemical formula to denote the state (solid, liquid, gaseous, aqueous), the following abbreviations should be used in parentheses after the chemical symbol (not as subscripts):

(s) for solid      (ℓ) for liquid (not 'l' or 'liq')

(g) for gaseous    (aq) for aqueous (not aq.)

For example:

**Prefixes for SI and metric units**

28. Prefixes for SI and metric units are given in Appendix A.

**Journal titles**

29. In publications edited in the Publishing Section, journal titles are abbreviated on the basis of INIS: Authority List for Journal Titles (IAEA-INIS-11 (Rev. 19) (1992)), which is available on the MTCDC web site.

#### IV. LIST OF ABBREVIATIONS

30. It should be noted that some of the following abbreviations can have other meanings in addition to those given here.

a	are ( $10^2 \text{ m}^2$ )
a	year
A	ampere
Å	ångström (convert to nm)
abs.	absolute
AC	alternating current
acre	(do not abbreviate) (convert to $\text{m}^2$ )
A.D.	anno Domini
ADC	analogue to digital converter
AF	audiofrequency
ALARA	as low as reasonably achievable
a.m.	ante meridiem (before noon)
amu	atomic mass unit (cf. u)
appm	atomic parts per million
approx.	approximate, approximately
Appx	Appendix
aq	aqueous (chemical formulas only)
AT	ampere-turn
at. wt	atomic weight
atm	atmosphere (convert to Pa)
at. %	atomic per cent
av.	average
AWC	available water capacity
b	barn ( $10^{-28} \text{ m}^2$ )
B	byte
bar	(do not abbreviate) (convert to Pa)
bbl	barrel
B.C.	before Christ
bcc	body centred cubic
b.p.	boiling point
BP	before present (geol.)
B.P.	boîte postale
Bq	becquerel
Btu	British thermal unit (convert to J)
c (as in c/s)	count (do not abbreviate — write counts/s)
c (as in c/s)	cycle (do not abbreviate — write cycles/s)
c.	circa
¢	cent (unit of currency or reactivity worth)
C	coulomb
cal	calorie (convert to J)
calc.	calculated
CBED	convergent beam electron diffraction
cc	(do not use — use $\text{cm}^3$ instead)
CCD	charge coupled device
cd	candela
CEC	cation exchange capacity
cf.	confer (= compare)

c.g.	centre of gravity
CGS	centimetre–gram–second (system)
Ch.	Chapter
CHPP	combined heat and power plant
Ci	curie (convert to Bq)
cm	centimetre
cm <sup>3</sup>	cubic centimetre (not cc)
cmHg	centimetre of mercury (convert to Pa)
Co.	Company
c/o	care of
coeff.	coefficient
conc.	concentrated
concn	concentration
Conf.	Conference
Congr.	Congress
const	constant
cont.	continued
Corp.	Corporation
corr.	corrected
CPE	centrally planned economy
crit.	critical
CRT	cathode ray tube
cryst.	crystalline, crystallized
CT	computed tomography
CV	coefficient of variation
CVD	chemical vapour deposition
c.w.	cold worked (of metals)
CW	continuous wave
cwt	(UK or US) hundredweight (convert to kg)
d	day
DAC	derived air concentration
DAC	digital to analogue converter
dalton	(do not abbreviate) ( $\approx 1$ u)
dB	decibel
DC	direct current
decomp.	decomposition
deg	(as in degK or degC — use K or °C instead)
°	degree of angle
°C	degree Celsius (centigrade)
°F	degree Fahrenheit (convert to K or °C)
°R	degree Rankine (convert to K or °C)
Dept.	Department
DF	decontamination factor
DF	diffusion factor
dia., Ø	diameter
DIC	dissolved inorganic carbon
dil.	dilute
dis/min	disintegrations per minute (use Bq (= dis/s) in preference)
dist.	distilled
\$	dollar (currency: US \$50; reactivity worth: 4.2\$)
dpa	displacements per atom
dpm	disintegrations per minute (use dis/min or Bq)
DREF	dose rate effectiveness factor

## ABBREVIATIONS AND SYMBOLS

DTA	differential thermal analysis
DTD	diurnal temperature difference
DW	dry weight
dyn	dyne (convert to N)
EBC	equivalent boron concentration
ECRH	electron cyclotron resonance heating
Ed. (Eds)	Editor (Editors)
EDC	eddy diffusion coefficient
edn	edition
EF	equilibrium field
EFPD	effective full power days
e.g.	for example
Eh	standard oxidation–reduction potential
EHT	extremely high tension
Einst	einstein (not E)
ekg	effective kilogram
ELISA	enzyme linked immunosorbent assay
EMF	electromotive force
EMU	electromagnetic unit
EPR	electron paramagnetic resonance
eq (as in meq)	equivalent, gram equivalent
Eq. (Eqs)	Equation (Equations)
erg	(do not abbreviate) (convert to J)
ESP	exchangeable sodium percentage
ESR	electron spin resonance
ESU	electrostatic unit
et al.	and others
et seq.	and what follows
etc.	et cetera
Eur.	European
EUV	extreme ultraviolet
eV	electronvolt
expt.	experimental
F	farad
fcc	face centred cubic
FFT	fast Fourier transform
Fig. (Figs)	Figure (Figures)
fima	fissions per initial metal atom
FIR	far infrared
fl oz	(UK or US) fluid ounce (convert to L)
FLR	finite Larmor radius
f.p.	freezing point
FPS	foot–pound–second (system)
Fr	franklin (convert to C)
FRC	field reversed configuration
FSD	full scale deflection
ft	foot (convert to m)
FTU	Frascati Tokamak Upgrade
FWHM	full width at half-maximum
f.y.	fiscal year

g	acceleration due to gravity
g	gram
G	gauss (convert to T)
gal	(UK or US) gallon (convert to L)
Gal	(do not abbreviate) ( $= 1 \text{ cm/s}^2$ )
g-at.	gram-atom
GLC	gas-liquid chromatography
GM	Geiger-Müller
Gy	gray
h	hour
(h) (e.g. MW(h))	heat, thermal (use (th) in preference)
H	henry
ha	hectare ( $10^4 \text{ m}^2$ )
HEED	high energy electron diffraction
HF	high frequency
hp	horsepower (convert to W)
HRC	Rockwell hardness
ht	height
HT	high tension
HTO	tritiated water
HVEM	high voltage electron microscope
HWGCR	heavy water moderated, gas cooled reactor
Hz	hertz (cycles per second)
ibid.	ibidem (in the same book)
ICF	inertial confinement fusion
ICF	ion cyclotron frequency
ICRF	ion cyclotron resonance frequency
ICRH	ion cyclotron resonance heating
ICS	integrated control system
i.d.	inside diameter, inner diameter
IDMS	isotope dilution mass spectrometry
i.e.	that is
IGSCC	intergranular stress corrosion cracking
ILB	initial lung burden
ILLW	intermediate level liquid waste
ILW	intermediate level waste
Im	imaginary (i.e. not Re)
IM	intramuscular
in	inch (in. if confusing without full stop) (convert to m)
Inc.	Incorporated
inHg	inch of mercury (convert to Pa)
insol.	insoluble
Int.	International
INTOR	International Tokamak Reactor
IP	intraperitoneal
IR	infrared
IRMA	immunoradiometric assay
IRP	International Reference Preparation
ITER	International Thermonuclear Experimental Reactor
IU	international unit
IV	intravenous

ABBREVIATIONS AND SYMBOLS

J	joule
JET	Joint European Torus
K	kelvin
kerma	kinetic energy released in material
kg	kilogram
kgf/cm <sup>2</sup>	kilogram force per square centimetre (convert to Pa)
km	kilometre
KMP	key measurement point
kW·h	kilowatt-hour
L	litre
LAF	laminar airflow
lb	pound (convert to kg)
lbf/in <sup>2</sup>	pound force per square inch (convert to Pa)
LCAO	linear combination of atomic orbitals
LD 50, LD <sub>50</sub>	50% lethal dose
LEED	low energy electron diffraction
LET	linear energy transfer
LF	low frequency
lg	logarithm to base 10
LHH	lower hybrid heating
LIB	light ion beam
lm	lumen
ln	natural logarithm
loc. cit.	in the passage already quoted
log	logarithm (cf. lg, ln)
LSD	least significant difference (or digit)
Ltd	Limited
LTE	local thermodynamic equilibrium
lx	lux
m	metre
M	molar concentration
Ma	million years (geol.)
man Gy	} units of collective dose (write with a hyphen when not preceded by a figure)
man rad (see rad)	
man rem (see rem)	
man Sv	
max.	maximum
MCA	maximum credible accident
MCA	multichannel analyser
MDM	minimum detectable mass
meq	milliequivalent (see eq)
MFECH	multiple frequency electron cyclotron heating
mGal	(see Gal)
MHD	magnetohydrodynamics
mho, Ω <sup>-1</sup> , S	siemens (write S)
μm	micrometre (do not write μ or micron)
mil	10 <sup>-3</sup> in (convert to mm)
mile	(do not abbreviate) (convert to km)
mill	\$10 <sup>-3</sup> (do not abbreviate)

min	minute
'	minute of angle
min.	minimum
MKS	metre–kilogram–second (system)
MKSA	metre–kilogram–second–ampere (system)
mm	millimetre
MMF	magnetomotive force
mmHg	millimetre of mercury (torr) (convert to Pa)
mo	morgan
mol	mole
mol.	molecule, molecular
mol. wt	molecular weight
MOS	metal–oxide semiconductor
m.p.	melting point
MS (MSS)	manuscript (manuscripts)
MSc	Master of Science
MSD	mean skeletal dose
MT	metric ton (= tonne, use t instead)
Mtg	Meeting
MTTF	mean time to failure
MW(e)	megawatt (electrical)
MW(th)	megawatt (thermal)
Mx	maxwell (convert to Wb)
m.y.	million years (geol.) (cf. Ma)
n	neutron
N	newton
N	nile (unit of reactivity — use \$ instead)
N	normal concentration
n.a.	not applicable
NAA	neutron activation analysis
NBI	neutral beam injection
NDT	nil ductility temperature
NDT	non-destructive test(ing)
NEMP	nuclear electromagnetic pulse
NIM	nuclear instrumentation module
NMR	nuclear magnetic resonance
No. (Nos)	Number (Numbers)
Np	neper
NRE	natural radiation environment
NTP	normal temperature and pressure (do not use unless temperature and pressure are specified — see STP)
nvt	neutrons–velocity–time
obs.	observed
o.d.	outside diameter, outer diameter
Oe	oersted (convert to A/m)
OER	oxygen enhancement ratio
ohm	(do not abbreviate)
Ω	ohm
OM	organic matter
O/M	oxygen/metal (ratio)
op. cit.	in the work quoted
oz	ounce (convert to g)



## ABBREVIATIONS AND SYMBOLS

p (as in p/s)	pulse (do not abbreviate — write pulses/s)
p. (pp.)	page (pages)
P	poise (convert to Pa·s)
Pa	pascal
para. (paras)	paragraph (paragraphs)
pc	parsec
pcm	pour cent mille (do not use)
PCRv	prestressed concrete reactor vessel
PCV	primary containment vessel
p.d.	potential difference
PDF	probability density function
%	per cent
‰	per mille
PET	positron emission tomography
PF	poloidal field
pH (as in pH7)	hydrogen ion exponent
PHA	pulse height analysis
PhD	Doctor of Philosophy
pk	peak
p.m.	post meridiem (after noon)
pmc	per cent modern carbon (or %C <sub>mod</sub> )
P.O.	post office
ppb	parts per billion
ppm	parts per million
prep.	preparation
psi	pounds per square inch (convert to Pa)
pt	(UK or US) pint (convert to L)
q	quintal (100 kg)
QE	quality engineering
QF	quality factor
qt	(UK or US) quart (convert to L)
R	röntgen (convert to C/kg)
rad	radian
rad	unit of absorbed dose (convert to Gy)
RBC	red blood cell
Re	real (i.e. not Im)
Re	Reynolds number
REB	relativistic electron beam
recryst.	recrystallized
Ref. (Refs)	Reference (References)
rem	röntgen equivalent man (convert to Sv)
rep	röntgen equivalent physical (do not use)
rev.	revolution (use rev./min, not rpm)
RF	radiofrequency
RFP	reversed field pinch
RFX	reversed field experiment
r.h.	relative humidity
RHEED	reflection high energy electron diffraction
RIA	radioimmunoassay
RMS	root mean square
ROI	region of interest
rpm	(do not use — use rev./min instead)

RSD	relative standard deviation
RWM	rod worth minimizer
s	second (not sec.)
"	second of angle
S	siemens
sb	stilb (convert to $\text{cd}/\text{m}^2$ )
SCE	standard calomel electrode
SD	standard deviation
SE	standard error
sec.	(do not use — use s instead)
Sect.	Section
Sem.	Seminar
SEM	standard error of the mean
SHE	standard hydrogen electrode
SMOW	standard mean ocean water (in ppm)
SMR	standard mortality rate
SNR	signal to noise ratio
sol.	soluble
soln	solution (chem.)
sp.	specific; species (sing.)
s.p.	sublimation point
sp. gr.	specific gravity
sp. ht	specific heat
sp. vol.	specific volume
SPECT	single photon emission computed tomography
SPND	self-powered neutron detector
spp.	species (plural)
sr	steradian
SRM	standard reference material
St	stokes (convert to $\text{m}^2/\text{s}$ )
St.	Saint
St.	Street
STEM	scanning transmission electron microscopy
STP	standard temperature and pressure ( $0^\circ\text{C}$ , 1 atm)
Sv	sievert
SWG	standard wire gauge
Symp.	Symposium
SYVAC	Systems Variability Analysis Code
t	tonne ( $10^3$ kg)
T	tesla
$T_{1/2}$	half-life
TCA	trichloroacetic acid
tce	tonnes of coal equivalent
TD	theoretical density
TDR	time domain reflectometry
TDS	total dissolved salts
TE	tissue equivalent
TEM	transmission electron microscopy
TF	toroidal field
TFTR	Tokamak Fusion Test Reactor
(th) (= (h))	
(e.g. MW(th))	thermal

## ABBREVIATIONS AND SYMBOLS

THERP	technique for human error rate prediction
toe	tonnes of oil equivalent
ton	UK (long) ton (2240 lb) or US (short) ton (2000 lb) (convert to tonnes, t)
torr	(do not abbreviate) (convert to Pa)
TREAT	transient reactor test
TSP	total suspended particulates
TTMP	transit time magnetic pumping
TU	tritium unit
u	unified atomic mass unit
UHF	ultra-high frequency
UHV	ultra-high vacuum
ur	radioelement concentration unit
UV	ultraviolet
V	volt
vac.	vacuum
vel.	velocity
VFA	volatile fatty acid
VHF	very high frequency
viz.	namely
vol.	volume
Vol. (Vols)	Volume (Volumes)
vol. %	volume per cent
v.p.	vapour pressure
V·s	volt-second
VUV	vacuum ultraviolet
W	watt
Wb	weber
WBC	white blood cell
WL·h	working level hour
WLM	working level month
WOCA	world outside centrally planned economies area
wt	weight
wt%	weight per cent (not w/o)
WWW	World Wide Web
XUV	extreme ultraviolet
yd	yard (convert to m)



**Editors' Appendix  
to  
Chapter 10**

**ABBREVIATIONS AND SYMBOLS**

***D.C. and N.Y.***

1. In affiliations (as well as normal text), D.C. (District of Columbia) takes full stops; N.Y. also takes full stops in affiliations when it follows the city New York. In a list of participants, where they appear as postal codes, and in references, DC and NY have no full stops. (US postal code prefixes are listed in Section C of Chapter XIII, List of Participants.)



# BIBLIOGRAPHICAL REFERENCES

## I. GENERAL PRINCIPLES

1. Bibliographical references are indications to the reader regarding the authority for statements in the text or the sources of fuller information on particular points. The accuracy of references affects both the credibility of the originator<sup>1</sup> and the reputation of Agency publications. The minimum information in a reference is that required for a librarian or researcher to identify and retrieve the work in question, but the reader may be glad of more information. For example, the titles of articles in journals and papers in proceedings are of interest to the reader and may be essential in retrieving the original. The number of pages in a document may also be added. The International Standard Book Number (ISBN) should not be included. Section VIII itemizes the information that should be supplied for various types of reference.

2. The originator is responsible for ensuring that the references are accurate and in the Agency's style.

3. References should be keyed to the text by numbers in square brackets corresponding to the order in which they are first mentioned. If a reference is first cited in a table, figure or footnote, it should be numbered according to the place in the text where the table, figure or footnote is first mentioned (i.e. not where the table, figure or footnote happens to be located on the page). Normally references should be numbered serially throughout the document, including any appendices, and collected in a single list (headed REFERENCES) after the last appendix and before any annex. Each annex in which references are cited must have its own reference list. (See the examples in Chapter 7, Headings, Subheadings and Enumeration, para. 14, for the numbering of references in annexes.)

4. If a document is long and complex the main divisions are called chapters and the numbering of references (as well as of tables, figures and equations) starts from 1 in each chapter. In this case each chapter in which references are cited would have its own reference list. An example of the decimalized numbering to be applied in such a case would be [4.68] for the 68th reference in Chapter 4. Where divisions of a book are by different, named authors they must have separate reference lists.

5. If an originator wishes to provide a guide for background reading or a general acknowledgement of sources used, such references should be headed BIBLIOGRAPHY, set out in reference form and put in alphabetical order by author rather than serially numbered (see the example in Section IX). If references are mentioned individually in the text, however, they must be numbered as described in para. 3 or 4. It is quite acceptable to have both references and a bibliography for the same text.

6. In a reference, the expression 'in press', with no further details, is not acceptable. The originator should either state where the work is to be published or write 'in preparation' instead. Updated information can be added to the list of references at a later stage in the production of a book intended for publication if details are sent to the Publishing Section. If the latest information on a work is that it has been 'submitted to' a particular journal, it will be considered as still 'in preparation'. In a reference to an Agency publication for which a number within a series has not yet been assigned, the series should not be mentioned.

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<sup>1</sup> The word 'originator' is used throughout this chapter for the author of a manuscript to be published by the Agency, to prevent confusion with the author of a work cited in a reference in that manuscript.

*Examples*

- [1] INTERNATIONAL ATOMIC ENERGY AGENCY, A National System for Feedback of Experience from Events in Nuclear Power Plants, IAEA, Vienna (in preparation).
- [2] TEIXEIRA, A.R.L., Acquired cell mediated immunodepression in acute Chagas' disease, J. Clin. Invest. (in press).

7. When a reference is to a personal communication or unpublished data, the affiliation of the author cited should be given.

*Examples*

- [3] ROOK, G., European Commission, Brussels, personal communication, 1999.
- [4] PHILLIPS, S.M., Forschungszentrum Jülich, KOCH, D., Physikalisch-Technische Bundesanstalt, Braunschweig, unpublished data.

**II. CITATION OF REFERENCES IN THE TEXT**

8. A reference list should include only those references cited in the text. In material submitted for publication by the Agency any numbered references in the list that are not cited in the text may be deleted by the editor. References are cited in the text as numbers in square brackets corresponding to the order in which they are first mentioned (e.g. "...in improving productivity [17, 18]."). If the reference number is an integral part of a sentence, the abbreviation 'Ref.' should be included (e.g. "This is discussed in Refs [2, 3].").

**III. AUTHORS' NAMES*****In the text***

9. When two authors are mentioned in the text their names are written as, for example, 'Smith and Jones', although in the list of references 'and' is omitted. If there are more than two authors, only the first name should be mentioned in the text, followed by 'et al.' (not in italics). Authors' names in the text are not fully capitalized except in footnote references (see para. 16).

***In the list of references***

10. For a reference with up to five authors (or editors), all names should be given unless the originator considers the first name followed by et al. to be sufficient. If a reference has more than five authors, it will be set with only the first author's name followed by et al., unless the originator requests that all names be included.

*Example*

- [5] OHKUBO, K., et al., Electron Cyclotron Heating of Stellarator Plasma with the Ordinary and the Extraordinary Modes in JIPP T-II, Rep. IPPJ-554, Inst. of Plasma Physics, Nagoya Univ. (1982).

11. When no author or corporate author is to be found, the reference should begin with the name of the article or book, not fully capitalized. For example:

- [6] Monoclonal antibodies and cancer, Editorial, Lancet **1** (1981) 421.



(See also Ref. [16].)

12. Particles such as De, di, Van and von that are separate from the main part of the surname are fully capitalized and followed by the main part of the surname in capitals, a comma and the initials of the given names (e.g. VON DRASCHE, R., VAN DE GRAAFF, R.J., DI PAOLA, F., AL-TAWEEL, H.). Where the particle is attached to the main part of the surname, only the first letter of the particle is capitalized (e.g. DiMAGGIO, J., McCORMICK, L.). (For alphabetization of names see Chapter 13, Alphabetical Lists and Indexes.)

#### IV. JOURNAL TITLES

13. INIS: Authority List for Journal Titles (IAEA-INIS-11 (as revised)) should be used for checking the correct names of journals. As a source of accepted abbreviations, Rev. 19 of IAEA-INIS-11 (1992), the last revision to contain abbreviations, should be consulted. It is available on the MTCB web site. For journals no longer published, the World List of Scientific Periodicals (in the IAEA Library) contains the names of journals current between 1900 and 1960.

#### V. USE OF 'ibid.'

14. To avoid repeating lengthy details, the term 'ibid.' should be used for a book or report that has appeared in the preceding reference. For example:

- [7] HARRISON, D.G., McALLAN, A.B., in Digestive Physiology and Metabolism in Ruminants, Vol. 2 (RUCKEBUSCH, Y., THIVEND, P., Eds), MTP Press, Lancaster, UK (1980) 205.
- [8] DURAND, M., KAWASHIMA, R., *ibid.*, p. 375.
- [9] DE FELICE, A., *ibid.*, Vol. 1, p. 800.

This form should not be used for articles in journals.

#### VI. REFERENCES AND FOOTNOTES

15. The list of references should not be used as a place to add marginal comments to the text; footnotes should be used for this purpose (see Chapter 12, Footnotes).

16. If there are only one or two references in a document, they should not be listed at the end but should be cited in footnotes on the pages where they appear, with authors' names fully capitalized. Incidental bibliographical references in, for instance, records of discussions are also best dealt with as footnotes.

#### VII. TRANSLATION

17. Titles of articles, books, reports, etc., should be quoted in the original language, except for references in languages not using the Latin alphabet, which should be translated and followed by a note in parentheses indicating the original language of the reference.

##### *Examples*

- [10] GEYH, M.A., Messungen der Tritium-Konzentration in Salzlaugen, Kali Steinsalz **5** (1969) 208.

[11] REFORMATSKIJ, I.A., Laboratories for Work with Radioactive Substances, Atomizdat, Moscow (1979) (in Russian).

18. If an English translation of a work has been published, details are added in square brackets, giving the publisher, year of publication, etc., of the translation. For example:

[12] REFORMATSKIJ, I.A., Laboratories for Work with Radioactive Substances, Atomizdat, Moscow (1979) (in Russian) [English translation: Dover, New York (1981)].

This form of reference is rarely necessary, however, details of the work in English usually being sufficient (compare also Refs [32] and [33]).

## VIII. PRESENTATION OF REFERENCES

19. The order of the items in a reference is indicated below by the numbers in parentheses and illustrated by examples. Inclusion of the titles of articles from journals or conference proceedings is recommended and for Agency publications is necessary.

### A. Books and reports

(1) Name(s) of author(s) or editor(s): surname first, fully capitalized, followed by a comma; then the initial(s), followed by a comma (if the first (or given) name is required in full, only the first letter is capitalized); 'Jr.' or 'III' last, followed by a comma. Editors' names given instead of authors are followed by (Ed.) or (Eds). For a report, if no author is named then the corporate author (if any), i.e. the originating institution, should be given, spelled out in full, in capitals.

**Note:** For the Agency's Technical Reports Series, IAEA Safety Standards Series, etc., the IAEA (written in full) is given as corporate author. However, for the Agency's Proceedings Series no corporate author is given: the reference begins with the title of the book, in lower case, with initial capitals (see Ref. [16]).

(2) Title of book or report, with initial capitals, followed by the edition number if necessary (e.g. '2nd edn'). If the work cited is the proceedings of a meeting, 'Proc. Conf.', 'Proc. Symp.', etc., followed by the name of the town, a comma and the year of the meeting, should be added in parentheses (see Ref. [16]).

(3) Volume number in Arabic numerals (even when the volume number in the work cited is in Roman numerals), written as, for example, 'Vol. 1', and not as for journals (see Section C below). If an entire multivolume work is cited, the total number of volumes should be stated (e.g. '3 vols', see Ref. [16]).

(4) Report number, if any.

(5) (a) Name of publisher, without Ltd, Inc., & Co., etc. (but note Pergamon Press, Academic Press); or

(b) Name of originating institution in full (see Ref. [17]) unless:

(i) It is the same as the corporate author, in which case an abbreviated form of the name may be given (see Ref. [18]).

(ii) It is known widely by its abbreviation (see Refs [16, 21]).

In all other cases this name must appear; the report prefix, however well known, is not enough (reasonable abbreviations of individual words may of course be used — see Ref. [17]).

(6) (a) The place of publication must be included (maximum two places); or

## BIBLIOGRAPHICAL REFERENCES

- (b) For reports, the place of origin must be included if not already part of the name of the originating institution (compare Refs [24] and [17]). (If the place of origin *is* included in the name of the originating institution but the latter is only represented in abbreviated form as part of a report prefix, then the place of origin must be spelled out (see Ref. [24]).)

**Note:** The name of the city alone is often sufficient, but for towns in the USA the postal code prefix should normally be added, and for cases where the city name alone might cause confusion, more information should be supplied (see Ref. [18]).

- (7) The year of publication, in parentheses.  
(8) The number of pages may be given (see Ref. [13]).  
(9) All references end with a full stop.

### *Examples*

- [13] STEPHENSON, R., Introduction to Nuclear Engineering, 2nd edn, McGraw-Hill, New York (1958) 491 pp.
- [14] INTERNATIONAL COMMISSION ON RADIOLOGICAL PROTECTION, Evaluation of Radiation Doses to Body Tissues from Internal Contamination due to Occupational Exposure, Publication 10, Pergamon Press, Oxford and New York (1968).
- [15] GUTHRIE, F.E., PERRY, J.J. (Eds), Introduction to Environmental Toxicology, Blackwell, Oxford (1980).
- [16] Plasma Physics and Controlled Nuclear Fusion Research 1994 (Proc. 15th Int. Conf. Seville, 1994), 4 vols, IAEA, Vienna (1995).
- [17] TEVEPAUGH, C.W., Impact of the Resource Conservation and Recovery Act on Energy Facility Siting, Rep. ORNL/TM-7768, Oak Ridge Natl Lab., TN (1982).
- [18] NATIONALE GENOSSENSCHAFT FÜR DIE LAGERUNG RADIOAKTIVER ABFÄLLE, Repository for High Level Waste: Construction and Operation, Rep. 85-04, Nagra, Baden, Switzerland (1985).
- [19] INTERNATIONAL ATOMIC ENERGY AGENCY, Quality Assurance in Biomedical Neutron Activation Analysis, IAEA-TECDOC-323, IAEA, Vienna (1984).
- [20] INTERNATIONAL ATOMIC ENERGY AGENCY, Establishing and Implementing a Quality Assurance Programme, Safety Guide Q1, Quality Assurance for Safety in Nuclear Power Plants and other Nuclear Installations, Code and Safety Guides Q1–Q14, Safety Series No. 50-C/SG-Q, IAEA, Vienna (1996).
- [21] KARSTAD, L.H., et al., Report to the Government of Kenya on Wildlife Disease Research, Rep. TA3291, FAO, Rome (1974).
- [22] MATHUR, R.K., SUNDER RAJAN, N.S., Concept, Approach and Experimental Programme of High Level Waste Disposal in Geological Formations in India, internal report, Bhabha Atomic Research Centre, Mumbai, 1983.
- [23] ARGONNE NATIONAL LABORATORY, Environmental Effects Research, Rep. ANL-83-100, Argonne Natl Lab., IL (1984).
- [24] DOUGLAS, R.L., HANDS, J.M., Jr., Gamma Radiation Surveys at Inactive Uranium Mill Sites, Technical Note ORP/LV-75-5, Office of Radiation Programs, Environmental Protection Agency, Las Vegas, NV (1975).
- [25] NUCLEAR REGULATORY COMMISSION, Generic Environmental Impact Statement on Uranium Milling Industry, Rep. NUREG-0511, Office of Standards Development, Washington, DC (1979).
- [26] VESELY, W.E., DAVIS, T.C., DENNING, R.S., SALTOS, N., Measures of Risk Importance and their Applications, Rep. NUREG/CR-3385, Battelle Columbus Labs, OH (1983).
- [27] HAZRA, D.K., Immunoradiometric Methods in Glycoprotein Estimation, PhD Thesis, London Univ. (1975).
- [28] UNITED STATES DEPARTMENT OF ENERGY, Primer on Tritium Safe Handling Practices, Rep. DOE-HDBK-1079-94, USDOE, Washington, DC (1994).

- [29] UNITED NATIONS, *Ionizing Radiation: Sources and Biological Effects* (Report to the General Assembly), Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), UN, New York (1982).
- [30] INTERNATIONAL INSTITUTE FOR APPLIED SYSTEMS ANALYSIS, *Energy in a Finite World: A Global Systems Analysis*, Ballinger, Cambridge, MA (1981).
- [31] INTERNATIONAL INSTITUTE FOR APPLIED SYSTEMS ANALYSIS, *Energy in a Finite World: Paths to a Sustainable Future* (Summary of Main Report), Ballinger, Cambridge, MA (1981).
- [32] BUNDESMINISTER FÜR FORSCHUNG UND TECHNOLOGIE, *Deutsche Risikostudie — Kernkraftwerke*, TÜV Rheinland, Cologne (1979).
- or
- [33] BUNDESMINISTER FÜR FORSCHUNG UND TECHNOLOGIE, *The German Risk Study*, Rep. EPRI-NP-1804-SR, Electric Power Research Inst., Palo Alto, CA (1981).

**Notes:** [16] There is no comma between abbreviations such as Conf., Symp. or Mtg and the name of the town where the event was held, whereas a comma would follow unabbreviated terms, for example Workshop (see Ref. [40]).

[25, 26] For NUREG reports it is important to determine the originating body; they do not all originate from the Nuclear Regulatory Commission.

[27] These are treated in the same way as reports.

## **B. Articles and chapters in books and reports**

- (1) Name(s) of author(s), as in A(1) above.
- (2) Title of article or chapter in double quotation marks, with an initial capital only for the first word (see Ref. [34]) and, of course, for proper nouns (see Ref. [35]).
- (3) Title of book or report, as in A(2) above. If the article or chapter title is not given, the book or report title should be preceded by 'in' (see Ref. [36]).
- (4) Volume number, as in A(3) above (see Ref. [40]).
- (5) Name(s) of editor(s) in capitals, followed by a comma and the abbreviation Ed. or Eds, all in parentheses, if the publication is a collection of papers by various authors (see Ref. [34]).
- (6) As for A(4–7) above.
- (7) First page number of article or chapter (and the last if known), or the section or chapter number, followed by a full stop.

### *Examples*

- [34] HOWLAND, G.P., HART, R.W., "Radiation biology of cultured plant cells", *Applied and Fundamental Aspects of Plant Cell, Tissue, and Organ Culture*, 2nd edn (REINERT, J., BAJAJ, Y.R.S., Eds), Springer-Verlag, Berlin (in press).
- [35] BURKE, S.D., HOWELL, J.P., "Impact of prolonged wet storage of DOE reactor irradiated nuclear materials at the Savannah River Site", *Proc. Topical Mtg on DOE Spent Nuclear Fuel — Challenges and Initiatives*, Salt Lake City, 1994, USDOE, Washington, DC (1994) 118–124.
- [36] GLASSER, A.H., CHANCE, M.S., DEWAR, R.L., in *Controlled Fusion and Plasma Physics* (Proc. 9th Eur. Conf. Oxford, 1979), Vol. 1, Culham Lab., Abingdon (1979) Sect. A3.1.
- [37] KAUFMAN, L., DEW HUGHES, D., in *Proc. Conf. on Calculation of Phase Diagrams and Thermochemistry of Alloy Phases*, Pittsburgh, PA, 1979.
- [38] FIL, N.S., et al., "Balancing passive and active systems for evolutionary water cooled reactors", *Evolutionary Water Cooled Reactors: Strategic Issues, Technologies and Economic Viability*, IAEA-TECDOC-1117, IAEA, Vienna (1999) 149–158.

## BIBLIOGRAPHICAL REFERENCES

- [39] LEONARD, J.H., “Radioactivity releases”, Elements of Nuclear Reactor Design (WEISMAN, J., Ed.), Elsevier, Amsterdam and New York (1977) Ch. 12.
- [40] GRAMBOW, B., LUTZE, W., “Chemical stability of a phosphate glass under hydrothermal conditions”, Scientific Basis for Nuclear Waste Management (Proc. Workshop, Boston, 1979), Vol. 2 (NORTHROP, C.J.M., Jr., Ed.), Plenum Press, New York (1980) 109–116.
- [41] KNAPP, E.W., MUSICK, C.R., “Digital core monitoring and protection systems”, Nuclear Power Plant Control Problems Associated with Load Following and Network Transients (Proc. IAEA/NPPCI Specialists Mtg Cadarache, 1977), CEA, Centre d’études de Saclay (1977) Session 4.2.
- [42] HANULIK, J., et al., “Regeneration and terminal treatment of decontamination reagents”, Water Chemistry and Corrosion Problems of Nuclear Reactor Systems and Components (Proc. Mtg San Miniato, 1981), Rep. IWGFPT No. 11, IAEA, Vienna (1981).
- [43] INTERNATIONAL NUCLEAR FUEL CYCLE EVALUATION, “Reference fuel cycles”, Waste Management and Disposal, Report of INFCE Working Group 7, IAEA, Vienna (1980) Ch. 2.

**Notes:** [35] No commas are needed between the place of publication, the year of publication in parentheses and the page number.

[36] The year of the meeting and the year of publication should both be given, even when they are the same.

[37] When the published title of the proceedings is unknown, as much information as possible should be given. If the year of publication is unknown, the year of the meeting should be given, but not in parentheses.

### **C. Articles in journals**

- (1) Name(s) of author(s), as in A(1) above.
- (2) Title of article if known, not in quotation marks and with initial capitals only for the first word and for proper nouns.
- (3) Title of journal, correctly abbreviated. Use INIS: Authority List for Journal Titles (IAEA-INIS-11). The last revision to contain abbreviations, Rev. 19 (1992), can be found on the MTCB web site. As well as giving the accepted abbreviations for many journals commonly cited in Agency publications, it can also be used as the basis for formulating abbreviations for journal titles that are not included.
- (4) Volume number in Arabic numerals, in bold type, not preceded by ‘Vol.’
- (5) Issue number (only required when each issue has page numbers starting from 1 — see Refs [47, 48]).
- (6) Year of publication in parentheses.
- (7) First page number of article (and the last if known).

#### *Examples*

- [44] COCHRANE, M.P., DUFFS, C.M., Endosperm cell number in barley, *Nature* **289** (1981) 399.
- [45] BLOUNT, E.I., Symmetry properties of triplet superconductors, *Phys. Rev., B: Condens. Matter* **32** (1985) 2935.
- [46] TEPPER, L., Suboptimal control study of a nuclear power plant, *IEEE Trans. Nucl. Sci.* **NS-22** (1975) 812.
- [47] PEACOCK, K.L., Design of discrete bandpass filters for petroleum exploration, *Oil Gas J.* **83** 42 (1985) 121.
- [48] ROYLE, A.F., Why geostatistics? *Eng. Min. J.* **180** 5 (1979) 92.
- [49] CHEN, Iwei, Irradiation-induced segregation in multi-component alloys, *J. Nucl. Mater.* **116** (1983) 249.

- [50] RARICK, J.A., "The role of fiber optics in physical security systems", Proc. 26th INMM Annual Mtg Albuquerque, 1985, Nucl. Mater. Manage. **14** 3 (1985) 199.
- [51] TERIK, S.O., McCABRE, A.B., J. Unreprod. Results **18** (1983) 15, 405.
- [52] TIQUE, X.O., Strange particles, Part 1 — Mesons, J. Unreprod. Results **15** (1982) 395; Part 2 — Bosons, J. Sporad. Rev. **23** (1983) 24; Part 3 — Steptons, Rev. Catastr. Math. Phys. **14** (1983) 1.

**Notes:** [45, 46] Some journals have single letters as part of the journal title; others have letters as part of the volume number.

[47] No commas are needed between the volume number, issue number, year of publication in parentheses and page number.

[48] No comma is necessary after the article title if this has its own final punctuation.

[49, 50] The original hyphenation and spelling are retained, i.e. are not changed to Agency style ('irradiation induced', 'multicomponent', 'fibre').

#### **D. Other types of reference**

— A patent (as much information as possible should be supplied):

- [53] MACEDO, P.B., LITOVITZ, T.A., SIMMONS, J.H., Fixation of Radioactive Materials in a Glass Matrix, Australian Patent 78/34388/B/, Int. Cl. CO3C 3/30, G21F 9/34, Sep. 1982, filed Mar. 1978; copies available from Commissioner of Patents, Canberra.

— A paper without proceedings:

- [54] AHLF, J., BELLMANN, D., DITTMER, H., MARTENS, H., "An irradiation capsule for reactor pressure vessel steel with a large specimen volume", IAEA-SR-77/54, paper presented at IAEA Sem. on Research Reactor Operation and Use, Jülich, 1981.

— An abstract:

- [55] KECKWICK, R.A., Jr., "Labelled antibody technique in communicable disease", Proc. 2nd World Congr. on Nuclear Medicine, Washington, DC, 1978 (abstract).

— An IAEA Information Booklet:

- [56] INTERNATIONAL ATOMIC ENERGY AGENCY, Nuclear Power, the Environment and Man, Information Booklet, IAEA, Vienna (1984).

— Two or more references grouped under one number (as may be acceptable if the originator did not follow the correct style of numbering and there were too many references for renumbering to be practicable):

- [57] BLIX, H., Safeguards and non-proliferation: The IAEA and efforts to counteract the spread of nuclear weapons, Int. At. Energy Agency Bull. **27** 2 (1985) 3–8.  
INTERNATIONAL ATOMIC ENERGY AGENCY, TASTEX: Tokai Advanced Safeguards Technology Exercise, Technical Reports Series No. 213, IAEA, Vienna (1982).  
INTERNATIONAL ATOMIC ENERGY AGENCY, IAEA Safeguards: Implementation at Nuclear Fuel Cycle Facilities, Safeguards Information Series No. IAEA/SG/INF/6, IAEA, Vienna (1985).

— Part of the US Code of Federal Regulations:

- [58] NUCLEAR REGULATORY COMMISSION, Licensing Requirements for Land Disposal of Radioactive Waste, 10 CFR 61, US Govt Printing Office, Washington, DC (1983).

## BIBLIOGRAPHICAL REFERENCES

— An electronic publication:

- [59] UNITED STATES DEPARTMENT OF ENERGY, Aerosol Fog System for Fixing Radioactive Contamination, Technology Deployment Fact Sheet (1999), <http://www.hanford.gov/techmgmt/factsheets/deploys/fogger.htm>

— A CD-ROM:

- [60] INTERNATIONAL ATOMIC ENERGY AGENCY, Isotope Techniques in Water Resources Development and Management, C&S Papers Series No. 2/C, IAEA, Vienna (1999) CD-ROM.

— A journal supplement:

- [61] PARKIN, D.M., BRAY, F.I., DEVESA, S.S., Cancer burden in the year 2000. The global picture, *Eur. J. Cancer* **37** Suppl. 8 (2001) S4–S66.

— An article in a newspaper or magazine:

- [62] PFANNER, E., Winning hearts of consumers, *Int. Herald Trib.* (22 Mar. 2004) 11.

— The Basic Safety Standards (BSS):

- [63] FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, INTERNATIONAL ATOMIC ENERGY AGENCY, INTERNATIONAL LABOUR ORGANISATION, OECD NUCLEAR ENERGY AGENCY, PAN AMERICAN HEALTH ORGANIZATION, WORLD HEALTH ORGANIZATION, International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources, Safety Series No. 115, IAEA, Vienna (1996).

— A Board of Governors document:

- [64] International Action Plan for the Radiological Protection of Patients, Resolution GOV/2002/36-GC(46)/12, IAEA, Vienna (2002).

— An INFCIRC:

- [65] Communication Received from Certain Member States Concerning Their Policies Regarding the Management of Plutonium, INFCIRC/549, IAEA, Vienna (1998).

## IX. PRESENTATION OF A BIBLIOGRAPHY

20. The items in a bibliography are listed alphabetically by author with a space after each item.

21. If several references in a bibliography are to works by the same author or group of authors, they are ordered chronologically with the earliest work first. It is not necessary to repeat the author's name. It should be written in full the first time and represented by a dash thereafter. Five or more references may form a section with the author's name as heading.

22. An example of a bibliography is given below.

**BIBLIOGRAPHY**

BOAG, J.W., Ionization measurements at very high intensities. I. Pulsed radiation beams, Br. J. Radiol. **23** (1950) 601.

— The recombination correction for an ionization chamber exposed to pulsed radiation in a 'swept beam' technique. I. Theory, Phys. Med. Biol. **27** (1982) 201.

BOAG, J.W., CURRANT, J., Current collection and ionic recombination in small cylindrical ionization chambers exposed to pulsed radiation, Br. J. Radiol. **53** (1980) 471.

INTERNATIONAL COMMISSION ON RADIATION UNITS AND MEASUREMENTS (Bethesda, MD)

Determination of Absorbed Dose in a Patient Irradiated by Beams of X or Gamma Rays in Radiotherapy Procedures, ICRU Rep. 24 (1976).

Average Energy Required to Produce an Ion Pair, ICRU Rep. 31 (1979).

Radiation Quantities and Units, ICRU Rep. 33 (1980).

The Dosimetry of Pulsed Radiation, ICRU Rep. 34 (1982).

Radiation Dosimetry: Electron Beams with Energies Between 1 and 50 MeV, ICRU Rep. 35 (1984).

Stopping Powers for Electrons and Positrons, ICRU Rep. 37 (1984).



**Editors' Appendix  
to  
Chapter 11**

**BIBLIOGRAPHICAL REFERENCES**

**I. GENERAL PRINCIPLES**

1. The limits of an editor's duty in checking and completing references will probably never be precisely formulated. Editors are expected to complete references when necessary and to track down missing information if it can be found within a reasonable time. When a list of references is discovered to contain a large number of inaccuracies and/or incomplete entries the editor should return the entire list to the originator for revision.
2. Details of references can in many cases be completed and confirmed by a search of the Internet, including the INIS database.
3. If a reference includes a journal issue number this should not be deleted unless the editor knows that the journal does not start from p. 1 with every issue.

**II. SPECIFIC POINTS**

***Agency publications***

4. For Agency publications, editors are obliged to check from the actual book that all details are complete and correct. Titles of papers from proceedings must be included, and when there are up to five authors all the names must be given, even if the originator gives only the first name followed by et al.
5. When a paper in the same Agency proceedings is cited as a reference, the title should not be given in case it is changed by the editor later. This is particularly important in proceedings with more than one volume and editor. The volume number should be given if known. The following order should be kept:

[66] ANDREWS, J.N.P., IAEA-SM-256/37, these Proceedings, Vol. 3.

***Other publications***

6. *Geneva Conferences on Peaceful Uses of Atomic Energy*: Proceedings of the first three conferences (in 1955, 1958 and 1964) were published by the United Nations, New York, and the fourth, in 1971, by the United Nations, New York, and the IAEA, Vienna.
7. *ICRP publications*: Owing to the inconsistency of presentation, only the title and number of an ICRP publication should normally be given; there is no need to specify whether it is a set of Recommendations or in the Annals of the ICRP (see Ref. [14]).

**III. PUBLISHERS**

8. The place of publication must appear after the publisher's name. When more than two towns are given in a manuscript reference, only two need be retained. If the full address of a little known publisher is given it should be retained. The country should only be added at the editor's discretion if the location of the publisher is not obvious from the name of the town alone. For towns in the USA, the state, in the form of the postal code prefix, should be added (e.g. Washington, DC, and Cambridge, MA), except after the city New York. The postal code

prefixes for the USA are to be found in Chapter XIII of the Editors' Supplement to the Style Manual.

#### **IV. POSITION OF REFERENCE LIST AND BIBLIOGRAPHY**

9. If a publication consists of sections that are run on, the reference list is run on to the last section. If such a publication includes annexes but no appendices, the main reference list is still run on to the last section of the main text, and each annex in which references are cited has its own reference list. However, if the publication includes appendices, the first of which begins on a new right hand page, the list should also begin on a new right hand page after the last appendix and before any annex. If a publication consists of chapters, where each chapter has its own reference list, the list is run on to the last section of the chapter. The same rules apply to bibliographies. Where both a reference list and a bibliography are given, the reference list appears first.

## FOOTNOTES

1. If insertion in the text of explanatory or supplementary details (references in discussions, explanations of unfamiliar terms, editorial notes, etc.) is not advisable, because the insertion breaks the continuity of the text unduly, because of the length of the passage, or because the insertion was made by someone other than the author, such details should be given in a footnote.

### I. IDENTIFICATION SIGNS

2. Footnotes should preferably be identified by superscript Arabic numerals. When this is not advisable (e.g. in tables or mathematical expressions), either lower case letters or asterisks, daggers and other symbols may be used (see examples in the Editors' Appendix to Chapter 14, Tables). When more symbols are needed, they can be doubled and tripled as necessary (see Section D of Chapter V in the Editors' Supplement to the Style Manual).

3. In a document consisting of separate articles, numbered footnotes begin with 1 in each article. In a document that is not so divided they are numbered consecutively throughout the work (including appendices), unless the work is long and complex so that it is divided into chapters and the tables, figures, etc., are numbered from (Arabic) 1 in each chapter and appendix (see Chapter 14, Tables, para. 6). In this case, footnotes are also numbered from 1 in each chapter and appendix, but for footnotes the decimalized form is unnecessary and the simple 1, 2, 3,... system of numbering should be used. Annexes and glossaries, because they are not integral parts of a document, should have footnotes numbered from 1 (simple 1, 2, 3,... numbering and not, for example, V-1) in all cases.

4. A footnote repeated on subsequent pages keeps the same number if there have been no new numbered footnotes since its first appearance. If there have been one or more new numbered footnotes, a short footnote is repeated and given the next number in sequence. If the footnote to be repeated is long, it should be referred to as follows: "See footnote 4 on p. 130." This sentence takes the next footnote number in sequence.

### II. PLACING THE IDENTIFICATION SIGN

5. The identification sign referring the reader to a footnote should be placed with care in such a way that there is no doubt about what is referred to. If a footnote concerns an entire sentence, the sign should follow the full stop; otherwise it should be placed immediately after the word or phrase it concerns, and within the final punctuation. If a footnote refers to the whole of a quotation or text in parentheses, the sign should be placed after the final quotation mark or bracket.

### III. REFERENCES AS FOOTNOTES

6. If there are only one or two references in a document, they should not be listed at the end but should be cited in footnotes on the pages where they appear, with authors' names fully capitalized. Bibliographical references are dealt with in Chapter 11. Incidental bibliographical references in, for instance, records of discussions are also best dealt with as footnotes.



**Editors' Appendix  
to  
Chapter 12**

**FOOTNOTES**

***Incorporation in the text***

1. Footnotes should first be examined to see if they could be incorporated in the text.<sup>1</sup>

***Location***

2. Footnotes must always begin on the page bearing the footnote symbol. When carrying over a footnote to another page cannot be avoided, the break should not be made at a full stop.

***Layout***

3. Footnotes are set in 9 point, with only the first line indented, and are separated from the bottom line of text by a thin line. The layout is as follows:

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<sup>1</sup> For footnotes relating to quotations, see paras 14 and 15 of Chapter 9, Quotations.



# ALPHABETICAL LISTS AND INDEXES

## I. GENERAL PRINCIPLES

1. The purpose of arranging a list or index in alphabetical order is to enable readers to find an entry at the point where they would expect to find it. If there could be any doubt about which is the keyword of a particular entry, the entry should be repeated at all the points in the index where the reader might reasonably look for it, or it should be listed once, with cross-references to that single entry at all other relevant points in the index.

2. In an index, the keyword or name is normally placed first, but it may be desirable (for example to avoid undue distortion of names) for it to occupy some other position. In a 'run-on' list within the text it is better not to rearrange the form of the entries at all, as the punctuation may become confusing:

Indonesia, the Islamic Republic of Iran, Iraq, Kenya, the Republic of Korea, Kuwait

(For the listing of country names, see also para. 6 of Chapter 17, Names and Titles.)

3. When the keyword is not the first word of the indexed item as normally expressed, e.g. 'Style' in the second example below, then all words normally written after it should appear in their correct order, followed by a comma and all words normally written before the keyword:

(index under I) IAEA Style Manual for Publications and Documents in English

(index under S) Style Manual for Publications and Documents in English, IAEA

## II. ALPHABETICAL ORDER

4. Entries should be ordered word by word exactly as they are spelled. In a multilingual list or index, the basic order is that of the Latin alphabet of 26 letters. Modified letters, such as ø and ü, should be treated as if immediately following the corresponding unmodified letters (for example see 'Müller' in the sample list in para. 8).

5. Hyphenated words that start with a prefix or combining form are treated as single words, i.e. the hyphen is not treated as a space (except for combining forms made from the names of countries and peoples, e.g. Graeco-). In contrast, hyphenated words whose parts are complete words (e.g. compound proper names, such as 'Drew-Taylor' in the sample list) and words separated by a slash (such as 'fuel/steel' in the sample list) are treated as if separated by a space. Apostrophes are not treated as spaces (see 'M'Mahon' in the sample list).

**Note:** Within abbreviations, hyphens, slashes, etc., are not treated as spaces.

6. Entries that begin with the same word but are followed, after a comma, by different initials or descriptive words should be listed according to the alphabetical order of these initials or words (see 'fuel' in the sample list). A series of entries beginning with the same letters or words and involving numerals should be ordered numerically rather than alphabetically (see 'Forsmark-2', 'Forsmark-3' in the sample list). However, entries of this kind that occur singly should be ordered alphabetically as if the numerals were spelled out (though sub- and superscript numerals should be ignored for this purpose); this applies also to entries that begin with numerals (except that prefixes to chemical names should be ignored: see '1,4-dioxane' in the sample list). A single year or century that is not one of a sequence

should be ordered alphabetically according to its spoken form (see ‘nineteenth century’ in the sample list).

7. Lists prepared on word processing systems which are not adapted to this style should be modified.

8. Given below are some examples of alphabetical listing.

De Gaspar, D.	Miller, C.A.
De la Ferté, B.	M’Mahon, T.D.
De Leone, V.	Mole, A.
Deal, J.	Mollar, M.
Dellmondo, F.	(although ll is regarded as a
Dell’mour, D.	single letter in Spanish)
1,4-dioxane	Møllar, K.
D <sub>2</sub> O	(although ø comes at the end
Drew-Taylor, K.	of the Norwegian alphabet)
Drews, A.	Moss, P.
	Muller, D.G.
excommunication	Müller, A.G.
ex-deacon	(ü follows u but precedes v)
	Murray, R.
Forsmark turbines	
Forsmark-2 reactor	<sup>14</sup> N reactions
Forsmark-3 reactor	<sup>15</sup> N beams
fuel, metal	Nelson, H.
fuel, mixed oxide	1987
fuel burnup	1988
fuel mixtures	nineteenth century
fuel/steel penetration	NO
fuels	N <sub>2</sub> O
	NO <sub>2</sub>
MacCauley, J.	noble gas equipment
McBryde, D.P.C.	
Miller, C., Jr.	



# TABLES

## I. GENERAL PRINCIPLES

1. The purpose of a table is to display information (usually numerical) in as concise a form as possible, with the spatial relationships of the items of information reflecting the logical connections between them.
2. Essentially the same information should not be presented in both a table and a figure (and/or the main text). If the form of the tabulated information is simple (e.g. only two columns), it may be sufficient to present the information as a list in the text; a separate table may be unnecessary.
3. If data are taken from a table previously prepared for a different publication, only those details relevant to the current work should be given, i.e. it is not obligatory to reproduce the entire table.
4. Each table must have a number and a descriptive heading. A separate list of headings is usually not required but may be warranted in certain publications, for example one that consists primarily of tables and where it would be useful to the reader to be able to locate a particular table quickly.

## II. PRESENTATION

### ***Table numbers***

5. Tables should normally be numbered consecutively throughout the document in Arabic numerals in the order in which they are mentioned in the text. The numbering sequence should be continued through appendices but started again for each annex (see Section III of Chapter 7, Headings, Subheadings and Enumeration).
6. In a long, complex document divided into chapters, the tables (as well as the figures, equations and references) are numbered from 1 in each chapter. In such cases, ‘decimalized’ Arabic numerals should be used, e.g. Table 1.3, Table 8.14 (referring to tables in Chapters 1 and 8, respectively). Numbering also begins from 1 in each appendix (for example, Table I.7 would be the seventh table in the first appendix — see Section III of Chapter 7).

### ***Units, abbreviations and numbers***

7. The originator must ensure that only the International System of Units (SI) and expressions and abbreviations accepted by the Agency are used (see Section II of Chapter 10, Abbreviations and Symbols). Where conversion of phased-out units to SI units is not practicable, the conversion factor should be given in parentheses or as a footnote.
8. The form Cs-137 rather than  $^{137}\text{Cs}$  is recommended for expressing nuclide and mass number in tables because it is easier to type and to read. If, however, the originator has used the form  $^{137}\text{Cs}$  in all or most of the tables in a manuscript, this form may be retained to avoid extensive retyping.
9. The following should be observed:
  - A full stop, not a comma, should be used as the decimal point.

- A zero should be typed before a decimal point if there is no other digit (e.g. 0.35, not .35).
  - The multiplication sign  $\times$ , not the scalar dot, should be used for multipliers in arithmetical expressions (e.g.  $3.5 \times 10^6$ , not  $3.5 \cdot 10^6$ ).
  - The scalar dot should be used for complex combinations of units (e.g.  $L \cdot m^{-1} \cdot s^{-1}$ , not L/m/s), though for simple expressions (e.g. m/s) the solidus is preferred.
  - Numbers greater than 9999 should be typed with the digits in groups of three separated by a space (not a comma), e.g. 3 510 699 (not 3,510,699).
  - Decimals should also be blocked off in groups of three, starting from the decimal point, e.g. 2.410 35.
  - If a table contains any numbers with five or more digits before or after the decimal point (visible or imagined), then numbers with four digits before or after the decimal point must also be divided, e.g. 9 999 in a table where 12 905 also appears.
  - If an item in a column is not applicable, 'n.a.' should be typed in that place. An em rule should be used to indicate cases where data are not available. The meaning of both 'n.a.' and the em rule should be explained in a footnote to the table.
10. The form 4E4 (instead of  $4 \times 10^4$ ), often used in computer printouts, is permissible in tables. As a multiplication factor, (E4) may appear in a column heading if it applies to the whole column.

### ***Punctuation and capital letters***

11. Punctuation in a table should be reduced to a minimum; a full stop is rarely needed at the end of an item, even if this is a complete sentence. Only the table heading is fully capitalized (with the exception of lower case unit symbols, lower case letters in mathematical expressions, etc.). Column headings start with an initial capital and have no final punctuation; otherwise, capitals are only required for proper nouns. Within a column, the first word of each new item of information has an initial capital.

### ***Reproduction of tables from other publications***

12. If a table is to be reproduced from another publication, the originator is responsible for obtaining the necessary permission from the original author and/or publisher and for supplying a suitable acknowledgement.

13. Exact source details of a table to be reproduced from a previously published work, including the Agency's, should be provided so that adequate acknowledgement can be made, either after the heading (usually reference numbers only, with complete details in the list of references) or in a footnote. If modifications are required, the acknowledgement would become: "Adapted from..." Before submitting the manuscript for publishing, the originator should, where practicable, convert any non-standard units to SI units and ensure that only abbreviations and expressions accepted by the Agency are used (see para. 7).

14. A table from another publication sometimes contains bibliographical references relating to a different document. These should be either removed or adapted to the current work.

**Note:** Footnotes to tables are discussed in paras 18–20 of the Editors' Appendix.

**Editors' Appendix  
to  
Chapter 14**

**TABLES**

**I. PRESENTATION**

***Dimensions***

1. The type area of a printed page in most Agency publications measures 12 cm × 19 cm. The corresponding type size in tables is 9 point, with headings in 10 point capitals.
2. An effort should be made to present a table upright ('portrait') on a single page or part of a page. Larger tables can be typed in 8 point, but this solution has obvious limits.

***Long portrait tables***

3. For a portrait table that continues over more than one page, the table heading, followed by '(cont.)' in lower case, and the column headings are repeated on every page. A line of dashes appears at the bottom of every page except the last, which ends with a solid line, followed by any notes. Every effort should be made to begin such a table on a left hand page.

***Wide tables***

4. A table that is too wide to be placed upright on a single page may be placed (a) sideways on the page ('landscape') or (b) upright across two facing pages. For (a), if the table is too long to fit on a single page, a line of dashes ends the left hand part of the table and begins the right hand part. Column headings are not normally repeated on the right hand page. If a wide table is shorter than the page width, it should be centred. For (b) both halves of the frame and all lines must correspond exactly and it is not necessary for the first column of the table to be repeated on the right hand page. Every effort should be made to begin all tables that occupy more than one page on a left hand page.
5. If a wide table is so long that it must continue beyond the first pair of pages, for case (a) a line of dashes should be typed at the end of every page except the last and at the beginning of every right hand page. For case (b) a line of dashes ends every page pair except for the last. For both cases the table heading, followed by '(cont.)' in lower case, is repeated on every left hand page for (a) or across every page pair for (b). The column headings are also repeated. All tables end with a solid line, followed by any notes.
6. A table containing so much information that its width cannot be accommodated in a double page spread can sometimes be conveniently split into more than one table. If all else fails, fold-out insert pages may have to be used; this requires prior approval from the Chief Editor.

***Narrow tables***

7. A table should ideally occupy the entire page width, but if this would require excessively wide spaces between the columns, it is better to have a narrow table, centred. Table headings and ruled lines should normally not extend beyond the material of the table. Very narrow tables can sometimes be formed into two parallel blocks, with the set of column headings repeated. If two narrow tables are mentioned close together in the text they can be set side by side, although this would not be appropriate if the headings were very long.

### **Table headings**

8. Headings start at the table margin (not centred), are normally justified and are typed in 10 point capitals (with the exception of lower case units, lower case letters in mathematical expressions, etc.). TABLE is followed by the appropriate Arabic numeral, a full stop and the main heading, as brief as possible, with no terminal punctuation. Descriptive matter (or a subheading) is set in 10 point italics (not in capitals) in parentheses and starts on a new line at the margin (cf. example (b) at the end of this appendix). A long descriptive subheading could appear as a footnote.

### **Column headings**

9. The first column heading should be set at the left hand margin but all others should be centred over the longest item in the column. All column headings should be centred vertically. The column heading should consist of a brief but clear description of the characteristics of the entries in the column. Abbreviations should be used where necessary, and if they are not likely to be well known they should be defined in footnotes. If abbreviations are not convenient, or if there are many narrow columns, Arabic numerals or capital letters may be used as column headings and defined in footnotes.

10. If only one unit of measurement is used per column, this is written in its standard abbreviated form in parentheses immediately under the description in the column heading, together with any multiplication factor. It should be possible to read the figures in the column as if followed immediately by the unit (and multiplication factor, if any), e.g. ( $10^6$  kg). In a group column heading with subcolumns underneath, a unit that applies to all subcolumns appears only in the group heading (see example (a)).

### **Material in columns**

11. Every column in a table should be aligned according to its contents. In general, each item in a column starts at the left hand margin of the column and is not centred (though, with the exception of the first column, the column heading is centred). However, when numbers in a column are to be directly compared or added vertically they should be set with the decimal points (visible or imagined) directly in line (compare examples (b) and (c)).

12. When the majority of the items in a column consist of ranges or mathematical expressions containing multiplication signs, these items should be centred on the en rules or the multiplication signs, and other items in the column should be centred on the longest of these ranges or mathematical expressions. If the other items in the column consist of numbers to be compared, then the longest of these items should be centred on the en rule or the multiplication sign and the remaining numbers to be compared should then be aligned decimally with this longest number.

$$\begin{array}{c}
 4 \times 10^4 \\
 0.3 \\
 3 \times 10^6 \\
 110.4 \\
 2-5 \\
 [3] \\
 \text{See Table 4}
 \end{array}$$

13. If the majority of items in a column consist of decimally aligned numbers, the other items in the column, such as ranges or arithmetical expressions containing multiplication signs, should be centred on the longest of the decimally aligned numbers (see example (b)).

14. If an item in a column consists of a single line of text, it should be centred; an item consisting of multiple lines of text should be aligned at the left margin of the column.

## TABLES

15. Sub-items should begin with an initial capital and be indented by two spaces. If there are no spaces between items, turnover lines should also be indented by two spaces. If there are spaces between items, turnover lines should not be indented.

### **Horizontal and vertical lines**

16. Ruled lines should be used sparingly. Vertical lines are only occasionally required, e.g. to show the limits of several subcolumns grouped under general headings. They are not required on either side of a table unless the material in the table is so divided (cf. example (a)). A horizontal line within a table is seldom needed unless a group of items has to be separated from the others (cf. example (b)). A horizontal line is always drawn at the top of a table under the heading, under the column headings and at the bottom (above the footnotes, if any). If a table is continued overleaf, the line at the bottom of the page is dashed (see paras 3 and 4).

### **Footnotes**

17. Footnotes to a table are keyed by a different system from that of the main text, preferably by raised lower case letters. This is to distinguish them from footnotes to the text (Arabic numerals) and to prevent confusion with numbers in the columns. Therefore a footnote to a table heading is usually indicated by <sup>a</sup>. The raised footnote symbols are applied in sequence row by row down the table (cf. example (d)). If a footnote symbol has to be placed against a single character, in order that this symbol not be mistaken for an algebraic symbol, for example, another symbol may be used for the footnote and a space set between the column entry and the symbol (cf. example (c)). Footnotes are typed in 9 point and have final punctuation. The footnote symbol is set at the left margin; the first line of text and all turnover lines begin on a 4 mm indent.

18. In a table occupying more than one page, recurring footnotes may be collected together at the end of the table, in which case *For footnotes see p. 473.* (or *...see end of table.*) (in 9 point italics) appears at the bottom right hand corner of every right hand page.

19. Not every note at the bottom of a table has to be a lettered footnote keyed to an entry in the table. A general remark may be preceded by **Note:** (9 point bold) (cf. example (b)). Lettered footnotes should follow such a note.

### **References**

20. References cited in a table should be incorporated in the list of references and take reference numbers corresponding to the place in the text where the table is first mentioned (i.e. not where it actually appears on the page). They should not be set under the table as footnotes unless there are only one or two references in the whole document and the document contains no list of references (see Chapter 12, Footnotes).

## **II. PAGE LAYOUT**

21. When more than six pages of uninterrupted tables and/or figures appear together, a note should appear in 9 point lower case italics on the bottom line of the page preceding the first page of tables/figures:

*Text cont. on p. 159.*

The page preceding the set of tables/figures should preferably end with a full stop.

22. Short pieces of text should not be placed within a sequence of pages containing tables and/or figures; it is better to have wide spaces between the tables/figures.

(a) Column and subcolumn headings with ruled vertical lines.

TABLE 1. RESULTS OF ANALYSIS OF RUN DURATIONS

Run No.	Duration (h)	Duration (%)				
		Process vessel			First filter	Second filter
		Glass	Walls	Total		
P33	12	38.8	32.5	71.3	28.7	—

(b) Table heading including maths, references and explanatory note; general remarks as a footnote; horizontal lines only to separate groups. (If the diffusion categories A, B, C, ... had not been defined in the accompanying text, they would require explanation in footnotes to this and other tables in which they occur.)

TABLE 2. COEFFICIENTS FOR DETERMINING RELEASE HEIGHT DEPENDENT DIFFUSION PARAMETERS ( $\sigma_y = p_y x^{q_y}$ ;  $\sigma_z = p_z x^{q_z}$ ) (based on measurements at Jülich and Karlsruhe [19–21])

Release height (m)	Coeffi- cient	Diffusion category					
		A	B	C	D	E	F
50	$p_y$	1.5	0.876	0.659	0.640	0.801	1.294
	$q_y$	0.833	0.823	0.8	0.784	0.754	0.718
	$p_z$	0.515	0.127	0.165	0.215	0.264	0.241
	$q_z$	1.219	1.108	0.996	0.885	0.774	0.66
100	$p_y$	0.170	0.324	0.466	0.504	0.411	0.253
	$q_y$	1.296	1.025	0.866	0.818	0.882	1.057
	$p_z$	0.051–0.670	0.070	0.137	0.265	0.487	0.717
	$q_z$	1.317	1.151	0.985	0.818	0.652	0.486
180	$p_y$	0.671	0.415	0.232	0.208	0.345	0.671
	$q_y$	0.9	0.9	0.9	0.9	0.9	0.9
	$p_z$	0.024–0.5	0.033	0.104	0.307	0.546	0.484
	$q_z$	1.505	1.320	0.997	0.734	0.557	0.500

**Note:** For other release heights,  $\sigma_y$  and  $\sigma_z$  should be interpolated logarithmically according to the method described in Ref. [22].

TABLES

(c) Footnote to a single character; figures not compared or added vertically, e.g. because of unlike units.

TABLE 3. ATC DESIGN PARAMETERS

	Initial plasma	Compressed plasma
Major radius (m)	0.88	0.38
Minor radius (m)	0.17	0.11
Plasma current (kA)	50	118
Toroidal field (T)	2	4.74
Current duration (ms)	~40	~5–10
Compression ratio $C$ *	1.34	1.34
Compression time (ms)	~2	~2

\*  $C = R_i/R_f$ .

(d) Sequence of footnotes.

TABLE 4. ELUTION EFFICIENCIES (%) OF GGs<sup>a</sup>

Elution No.	Generator size (mg)		
	2800	6200	1200
1	93.5	93.3	77.9 <sup>b</sup>
2	92.7 <sup>c</sup>	98.5	78.7
3	92.8	99.2	81.8
4	n.a. <sup>d</sup>	— <sup>e</sup>	85.1

<sup>a</sup> 10 mL saline elution.

<sup>b</sup> Generator autoclaved, elution continued with saline from PVC bags according to the procedure described in Ref. [28].

<sup>c</sup> Elution continued with saline from PVC bags.

<sup>d</sup> n.a.: not applicable.

<sup>e</sup> —: data not available.





# FIGURES

## I. GENERAL PRINCIPLES

1. All illustrations (photographs, diagrams, graphs, maps) should be treated as figures, numbered consecutively in Arabic numerals in the order in which they are referred to in the text and supplied with captions. The numbering sequence should normally be continued throughout the document, including appendices, but started again for each annex (see para. 16 and Chapter 7, Headings, Subheadings and Enumeration). Essentially the same information should not be presented in both a figure and a table (and/or the main text).
2. Every figure must be specifically referred to in the text, e.g. “Figure 3 shows”, “This is shown in Figs 4(a) and (b)”, “difference is clear (Figs 6(c)–(e))”.
3. When a manuscript consists of a set of papers by different authors or is composed from data supplied by a number of authors, the originator (e.g. the Scientific Secretary) should obtain the original figures from the authors at an early stage.
4. Figures in manuscripts submitted for editing should not be merged into the text but should be provided on separate pages at the end. Similarly, their electronic files must be provided separately and not, for example, embedded in Word. Digital graphic files can be submitted in the following preferred formats: Adobe Illustrator, Adobe Photoshop, Freehand, CorelDraw and Excel. GIF files and graphics taken from the Internet are not acceptable.
5. If the originals of figures are not available, scanned images might be acceptable, but it is advisable to consult with the Publishing Section before any scanning takes place.

## II. PRESENTATION

### *Dimensions*

6. The type area of the printed page is 12 cm × 19 cm. Original figures received for publication will be reduced or enlarged as necessary.
7. The absolute minimum height of lettering for printing (i.e. after any necessary reduction) is 1.5 mm.
8. Before submission of large illustrations that will require reduction to fit into the type area, or colour figures that will be reproduced in black and white, consideration should be given to whether important detail will be lost in the process.

### *Units and abbreviations*

9. The originator must ensure that only the International System of Units (SI) and expressions and abbreviations accepted by the Agency are used (see Section II of Chapter 10, Abbreviations and Symbols). Where conversion of phased-out units to SI units is not practicable, the conversion factor should be given in the caption. It is also acceptable to have both SI and non-SI units indicated on the same axis of a graph.

### *Legends and labels*

10. Lettering in figures should be kept to a minimum. Each item of information should preferably begin with an initial capital. Otherwise, capitals are required only for proper nouns.

11. A legend (e.g. an explanation of shading or symbols) should be placed on the diagram if there is room. It can otherwise be placed below the figure. If a legend is short and simple it can form part of the caption.
12. Axes of graphs should be labelled with the name of the measured quantity, beginning with an initial capital, followed by the unit of measurement in parentheses, e.g. Diffusion rate (mg/s). If a symbol is also given, it should be preceded by a comma, e.g. Time,  $t$  (ms). The label of a vertical axis should be placed parallel to the axis, unless it is very short. Repetitive numbering at the axes can be avoided by adding any multiplier to the label. For example, instead of numbering the divisions of an axis from  $1 \times 10^5$  to  $6 \times 10^5$  measuring a current  $I$  in amperes, the axis can be labelled  $I (10^5 \text{ A})$  and the divisions simply numbered from 1 to 6.
13. If the axis of a graph has a numbered scale, it does not require an arrow as well.
14. The following should be observed:
  - A full stop, not a comma, should be used as the decimal point.
  - A zero should be typed before a decimal point if there is no other digit (e.g. 0.35, not .35).
  - The multiplication sign  $\times$ , not the scalar dot, should be used for multipliers in arithmetical expressions (e.g.  $3.5 \times 10^5$ , not  $3.5 \cdot 10^5$ ).
  - The scalar dot should be used for complex combinations of units (e.g.  $\text{L} \cdot \text{m}^{-1} \cdot \text{s}^{-1}$ , not  $\text{L}/\text{m}/\text{s}$ ), though for simple expressions (e.g.  $\text{m}/\text{s}$ ) the solidus is preferred.
  - The form 4E4 (instead of  $4 \times 10^4$ ), often used in computer printouts, is permissible in figures.

### **Figure captions**

15. Every figure must have a caption. Captions should be concise, should not repeat information already contained in the text or a table, and should not contain information whose proper place is in the text.

### **Figure numbers**

16. In principle, figures are numbered consecutively throughout the document (see para. 1). However, in a long, complex document divided into chapters, the figures (as well as the tables, equations and references) are numbered from 1 in each chapter. Thus Fig. 3.5, Fig. 8.14 refer to figures in Chapters 3 and 8, respectively, and the fifth figure in the first appendix would be Fig. I.5 (see Section III of Chapter 7, Headings, Subheadings and Enumeration).

## **III. REPRODUCTION OF FIGURES FROM OTHER PUBLICATIONS**

17. If a figure is to be reproduced from another publication, the originator is responsible for obtaining the necessary written permission from the original author and/or publisher and for supplying a suitable acknowledgement.

18. Exact source details of a figure to be reproduced from a previously published work, including the Agency's, should be provided so that adequate acknowledgement can be made in the caption. If the figure comes from an Agency publication, the electronic file of the figure can often be retrieved or the figure can be scanned. If necessary, modifications can be made in the Publishing Section, and the acknowledgement would become: "Adapted from..." Before submitting the manuscript for publishing, the originator should, where practicable, convert any non-standard units to SI units and ensure that only abbreviations and expressions accepted by the Agency are used (see para. 9).

## FIGURES

19. A figure from another publication sometimes contains bibliographical references relating to a different document. These should be either removed or adapted to the current work. If a diagram reproduced from another publication contains more information than is required for the current work, all numbers indicating legends that have been deleted, abbreviations and symbols without explanation, etc., should be removed.



**Editors' Appendix  
to  
Chapter 15**

**FIGURES**

**I. PRESENTATION**

1. Wide figures can be printed sideways on the page (landscape), with the top of the picture against the left hand margin. They can also be spread over two facing pages, but the cut in the middle may be detrimental to the figure. If a diagram is so large and full of essential information that its width cannot be accommodated within two facing pages, a fold-out insert page may be the only solution. This requires prior approval from the Chief Editor.
2. Difficult problems should be discussed with the Production Unit at an early stage (i.e. before the edited material is submitted for production).
3. To save space, graphs containing areas with no curves or symbols can almost always be cropped. Legends and notes can often be moved closer to the centre of the diagram.
4. If a figure is to be placed sideways on the page or if two narrow figures are to be placed side by side, the captions should be typed with the same width as the figures. The editor should provide clear instructions to the Production Unit concerning the layout of such figures.

**II. FIGURE CAPTIONS**

5. Figure captions are set in 9 point italics and end with a full stop. Variables, which are written in italics (see Chapter 16, paras 1 and 2), are set in normal type in figure captions, except for lower case Greek letters representing variables; upper case Greek letters are always written in normal type. (See also Appendix C.) The caption should be placed below the figure and separated from it by a line space. There should be two line spaces separating the top of a figure from the text above it and two line spaces separating the caption from the text below it. The caption should begin at the left hand margin unless it is shorter than the type width (for portrait figures) or type length (for landscape figures) of the page, in which case it is centred on the page.

*FIG. 11. (a) Current profile shape parameter  $a$  during a typical PPCD discharge; (b) surface poloidal magnetic field fluctuation during the same discharge (after Carpenter [83]).*

*FIG. 1. Evolution of activity of parent radionuclide,  $A_p$ , with time.*

6. Where the parts of a figure will not fit on a single page, each part may have a separate caption.

*FIG. 2(a). High energy reference spectra — CERN, FFTP and SSRL.*

*FIG. 2(b). High energy reference spectra — JINR and IHEP.*

7. If a caption includes a long explanatory list of symbols or a sequence such as (a), (b), (c),..., each item may start on a new line, when space permits. Narrow lists could be formed into columns.

### III. PAGE LAYOUT

8. The remarks in paras 21 and 22 of the Editors' Appendix to Chapter 14, Tables, apply equally to figures.

### IV. OTHER POINTS

#### ***Explanation of symbols***

9. All symbols in the figure should be explained and, conversely, the legend should contain no symbols that do not appear in the figure.

#### ***Placement of figures***

10. Figures should not be placed in frames. Figures narrower than 12 cm (or 19 cm if set sideways (landscape)) should be centred.

# MATHEMATICS

1. Variables should be set in italics and vectors in bold italics. This rule notwithstanding, whether or not they represent variables, lower case Greek letters should be set in italics and upper case Greek letters should be set in normal type (see also Appendix C). If words or abbreviations are used to represent quantities, they should be set in normal type, and their multiplication should be indicated by using a multiplication sign rather than by simple juxtaposition (see para. 8). Punctuation is always in normal type.

2. Subscripts and superscripts to variables should be set in italics when they are themselves variables but in regular type when they stand for a word, e.g.  $x_n$  ( $n = 1, 2, 3$ ) but  $x_t$ , where ‘t’ stands for toroidal. Greek letters are treated as described in para. 1 and in Appendix C.

## ***Display of mathematical expressions***

3. Cumbersome mathematical expressions should not be run on in the text, but should be displayed.

4. Mathematical expressions that are displayed should start on the paragraph indent wherever possible.

5. When expressions are split over several lines, operational and equals signs should be placed at the beginning of the new line, not at the end of the preceding line, as follows:

$$\begin{aligned}
 B &= \dots\dots\dots \\
 &+ \dots\dots\dots \\
 &- \dots\dots\dots \\
 &\times \dots\dots\dots
 \end{aligned}
 \tag{1}$$

## ***Punctuation***

6. A displayed mathematical expression is not followed by any punctuation. A comma or semicolon should, however, be used between juxtaposed formulas, e.g.:

$$a^2 = ml, l = 1, 2, 3, \dots n \tag{2}$$

## ***Products***

7. The normal algebraic product is usually indicated by the juxtaposition of symbols, i.e. without dot or cross (e.g.  $ab$ ,  $T_0mv$ ), but there may be exceptions if the fact of multiplication is to be emphasized or if the product could be confused with an abbreviation.

8. There are other instances where  $\times$  is used in multiplication:

(a) If an algebraic product is split over more than one line (in this case, the second and subsequent lines are preceded by  $\times$ );

(b) In expressions like  $4 \times 10^{20}$  cm ( $4 \cdot 10^{20}$  should not be used);

(c) In expressions where words or abbreviations are used to represent quantities, e.g.:

$$\text{total overnight cost} = g \times \text{factor} \times \text{TCC} \times i \tag{3}$$

$$\text{IDC} = 4 \times \text{TOC} \{ (1 + e)^{0.6\tau} [(1 + i)^{0.4\tau} - 1] \} \text{TCC} \tag{4}$$

where  $e$  is the escalation rate,  $i$  is the cost of money and  $\tau$  is the construction period.

## Equation numbers

9. Expressions to be referred to in the text should be numbered in parentheses at the right hand margin.
10. For an expression extending over several lines, the equation number should be placed against the last line or just under it (see Eq. (1)). Where several mathematical expressions are considered collectively and given a single equation number, that number should be centred vertically.
11. Equations are normally numbered consecutively from (1) throughout the document, including appendices; numbering starts again for each annex. However, in a long and complex document divided into chapters, where tables, figures and references are numbered from 1 in each chapter, the equations must be numbered in the same way. Thus Eq. (3.5), Eq. (9.23) refer to equations in Chapters 3 and 9, respectively, and the tenth equation in Appendix I would be Eq. (I.10) (see Section III of Chapter 7 for further details on numbering in appendices and annexes).
12. References to equation numbers can be made in several ways. At the beginning of a sentence ‘Equation (5)’ is written in full. Otherwise ‘Eq. (9)’, ‘Eqs (11)–(14)’ (note that the plural abbreviation has no full stop), ‘expression (5)’, ‘inequality (7)’ and so on should be used (depending, of course, on the item in question). The numbers may also be written alone in the following way: ‘in (9) and (11)’, ‘in accordance with (11)–(14)’, i.e. without any word indicating the type of expression.

## Other points

13. The natural logarithm should be written  $\ln$ , not in italics, and should be separated from the previous and subsequent characters by a space (e.g.  $\ln a$ ). The logarithm to base 10 is written  $\lg$  (e.g.  $\lg b$ ).
14. The abbreviations  $\tan$  and  $\cot$  should be used rather than  $\text{tg}$  and  $\text{ctg}$ , and  $\sinh$  and  $\cosh$  rather than  $\text{sh}$  and  $\text{ch}$ .
15. Spaces should be left before and after  $\sin$ ,  $\cos$ ,  $\tan$ ,  $\cot$ ,  $\sec$ ,  $\text{cosec}$ ,  $\ln$ ,  $\lg$ , etc., except that no space is left when the argument begins with a parenthesis:  $2\pi \sin \theta$ ;  $(x - 1) \cos(\alpha + 2)$ .
16. Plus, minus, plus or minus, multiplication, greater than, less than, equals and approximately equals signs should have a space on either side except in sub(super)scripts or when they indicate sign or magnitude:

$$128 \pm 6$$

but

The value was  $-29$  and the estimated error was  $\pm 6$ .

$$a + b \approx c \tag{5}$$

$$q^{a+b} = (-1)^{a+b} \tag{6}$$

at low energies ( $< 7$  keV), *not* ( $< 7$  keV)

17. The differential symbol  $d$  appearing in derivatives (denoted  $df/dx$ ) should be separated from the previous character by a space and should be in normal rather than italic type:

$$\int_0^1 F(t) dt = dp/dt + c$$



18. A summary indication of units in an expression is acceptable. Equations (7a) and (7b) show two alternatives suitable for this purpose.

$$B = \frac{mTv}{E} \text{ (g, K, s}^{-1}\text{, J)} \quad (7a)$$

$$B = \frac{m \text{ (g)} T \text{ (K)} v \text{ (s}^{-1}\text{)}}{E \text{ (J)}} \quad (7b)$$

19. For combining units in simple expressions, e.g. 100 cm<sup>2</sup>/s, the solidus (/) is preferred, but in more complex expressions the raised dot should be used (10 MW · m<sup>-2</sup> · a<sup>-1</sup>).

20. In complex expressions that require many pairs of parentheses, the usual order of brackets is {[ (...)]}. Brackets (as well as summation, product and integral signs) should be of a size appropriate to the part of the equation to which they belong:

$$F_E = \frac{m}{3} \left\{ 1 + k^2 \left[ \left( \frac{\mu}{1-\mu} \right)^3 \left\{ 3x + 5 \left[ m(m-1)\mu^2 + m(m+1)(1-\mu)^2 \right] \right\}^3 r_\gamma \frac{r_\alpha}{a} \right] \right\} \quad (8)$$

21. Functional brackets, as in  $f(x, y; t)$  and  $\text{TOC}(x + 1)$ , are normally round.

22. If an exponent is long or complicated, the form  $\exp(a + b + c)$  should be used rather than  $e^{a+b+c}$ .

23. In English, full stops, not commas, are used as decimal points. Commas are appropriate in French, Russian or Spanish.

24.  $\cong$ ,  $\approx$ ,  $\simeq$  all mean ‘approximately equal to’ but for uniformity only  $\approx$  should be used.  $\propto$  means ‘proportional to’.  $\sim$  may mean ‘approximately equal to’, ‘of the order of’ or ‘about’, and is used as follows:

at very high neutral beam energies ( $\sim 1$  MeV) and magnetic fields ( $\sim 15$  T)

$\sim$  should not be used to mean ‘proportional to’ (use  $\propto$ ).  $\simeq$  means ‘asymptotically equal to’ and is less common.

25. The symbols  $\gg$  and  $\ll$  are used to mean ‘much greater than’ and ‘much less than’, respectively.

26. = should not be used to define symbols after an equation unless another equation is involved, e.g.:

$$y = kx \quad (9)$$

where  $k$  is a constant coefficient.  
(not “where  $k =$  a constant coefficient.”)



## NAMES AND TITLES

### I. STATES

1. The names of States may have more than one form: the official designation and the short form by which the State is generally known. The official and short forms of all States are given in the correspondence instructions on OASIS. A list of Member States of the Agency in their short form can be found in the booklet entitled Board of Governors and Permanent Missions to the IAEA, which is also available on OASIS.

2. For territories whose international legal status is in doubt, the Office of External Relations and Policy Coordination should be consulted.

3. The official designation should be used, except that in references to and quotations from treaties and international agreements, and statistical or other material supplied by the authorities of an area or from a United Nations document, the names of States and other areas and adjectives of nationality should be retained in the original form.

4. Where countries, groups of countries or portions of countries are referred to as geographical areas and not as political entities, they may be designated by terms other than the official or short forms, provided that the reference is clearly a geographical one.

5. A distinction should be made between the United Kingdom (of Great Britain and Northern Ireland) and England, Great Britain, the British Isles, etc.

#### ***Alphabetical order***

6. Where a number of countries are listed in a table or displayed in the text they should normally be listed in alphabetical order. If there are reasons for following a different order (e.g. chronological order or descending order of importance), some indication should be given of what the order is, where this is not obvious. Care should be taken in such lists to conform to the Agency's style (see list of Member States in Chapter I, Front Matter), e.g.:

<i>(displayed list in text)</i>	<i>(list in table)</i>
Iran, Islamic Republic of	Iran, Islam. Rep.
Korea, Republic of	Korea, Rep.
Libyan Arab Jamahiriya	Libyan Arab J.

7. Where a list of countries is run on in the text, it is better not to rearrange the forms of the names (see para. 2 of Chapter 13, Alphabetical Lists and Indexes): for example, the Islamic Republic of Iran, the Republic of Korea.

#### ***Grammatical points***

8. For countries whose names are preceded by the definite article in running text, e.g. 'the Netherlands' or 'the USA', the article should normally be omitted from tables, headings and lists (other than those run on in the text). It is also omitted from affiliations of authors of papers and of contributors to drafting and review, and from postal addresses in lists of participants. In the case of El Salvador, however, the article (spelled with a capital E) forms an integral part of the official name of the country and should not be omitted.

9. The names of all countries are regarded as singular nouns of neuter gender, e.g. "The United States of America has (not have) its (not her or their) own system."

## ***Adjectives and nouns of nationality***

10. Adjectives of nationality are given in the correspondence instructions mentioned in para. 1. Where there is no convenient adjective of nationality the instructions give a possessive phrase (e.g. 'of Muscat and Oman'). In such cases, the words 'a national' must be added in order to designate a national of the country, e.g. 'a Liechtenstein national', 'a national of Liechtenstein'. (This does not apply, of course, if a noun is already listed for the purpose, e.g. 'Israeli'.) The corresponding collective plural is 'the nationals of', 'the people of', etc., according to the context.

## ***Abbreviations***

11. The abbreviations UK and USA may be used as nouns when these countries are named repeatedly, but the names of the States should be written in full on first appearance. 'US' may not be used as a noun; the proper abbreviation is USA. 'US' may be used as an adjective, whereas 'American' may not. 'Soviet' and 'the former USSR' are accepted terms.

## **II. ORGANIZATIONS**

### ***Names in English***

12. International organizations, government departments and services, and other public bodies should always be referred to by their full names or their accepted abbreviations. The correct names of international organizations, together with their accepted abbreviations, are given in the latest edition of the Yearbook of International Organizations. The names of international scientific organizations are to be found in the latest edition of the Directory of International Scientific Organizations. Both sources are available in the IAEA Reference Library.

13. The correct name and abbreviation of any organization can usually be found in the IAEA Reference Library, in the Glossary of Abbreviations and Acronyms on OASIS, or on the web page of the organization concerned.

14. The names of all organizations are regarded as singular nouns of neuter gender.

### ***Names in French***

15. For names of organizations in French, usually only the first word has an initial capital letter apart from common nouns that would normally be preceded by the preposition *du* or *de*, etc., and proper nouns:

Centre d'études nucléaires

Institut de protection et de sûreté nucléaire

Service Matériel électrique, Electricité de France

### ***The IAEA***

16. The IAEA administrative nomenclature can be found in the current IAEA Telephone Directory and in Structure of the Secretariat, Section AM.I/5 of the Administrative Manual, on OASIS. When referring to the Agency's activities, e.g. the fellowship and training courses programmes, the terminology in the latest Programme and Budget document should be used.

17. The following short forms may be used in Agency documents and publications:

The International Atomic Energy Agency

The Agency (in internal Agency documents)

The IAEA (preferred in Agency publications)

The Board of Governors of the International Atomic Energy Agency	The Board
The General Conference of the International Atomic Energy Agency	The General Conference, or the Conference (to avoid excessive repetition)
The Statute of the International Atomic Energy Agency	The Statute
The Agreement between the International Atomic Energy Agency and the Republic of Austria regarding the Headquarters of the International Atomic Energy Agency	The Headquarters Agreement

### ***The United Nations***

18. ‘United Nations’ when used adjectivally is written out in full, and has no apostrophe, e.g. “United Nations experts are considering...” ‘UN’ is not an accepted abbreviation for the United Nations, except as part of another abbreviation (e.g. UNIDO) or of a document symbol, or in bibliographical references.

19. A detailed survey of the structure of the United Nations and its principal organs, including its specialized agencies, can be found in the latest issue of the Yearbook of the United Nations as well as on OASIS under Staff Resources, United Nations. An organizational chart can be found at <http://www.unsystem.org/en/documents/Systemchart27Feb2004webv.pdf>

### ***Universities and other academic institutions***

20. The names of universities and other institutes of learning can be found in the current issue of The World of Learning, in the IAEA Reference Library, or on the web page of the institution concerned.

## **III. PERSONS**

21. Although the rules given here for presentation of names are for general application, national custom and the wishes of the person concerned should be respected and given due consideration. These rules have been drawn up for originators of Agency documents rather than for general correspondence.

22. A surname, even of several words, should always be given in full. Accents and other diacritical signs should be retained where they are known. Accents are omitted from Spanish names in block capitals, with the exception of the Spanish tilde (Ñ), which must be retained.

23. As a general rule, only the initials of a ‘given’ name need be written. Each initial should be followed by a full stop. When two or more initials are used they should not be spaced, e.g. J.W. Brown. However, in Chinese and certain other names (e.g. Korean, Malaysian and Vietnamese) the given names are not abbreviated.

24. The initials of hyphenated given names are also hyphenated: Jean-Paul Leblanc becomes J.-P. Leblanc.

25. The abbreviations Ch., Ph. and Th. should be changed to C., P. and T.

26. For transliterated Russian names, Ch., Kh., Sh., Ts., Ya., Ye., Yu. and Zh. are correct, since they each correspond to a single Cyrillic letter.

***Academic titles***

27. Academic titles (e.g. Dr., Professor) are not given with the names of authors of scientific papers; neither are they used for individuals mentioned in summaries of discussions, forewords, acknowledgements or lists of participants.

**Editors' Appendix  
to  
Chapter 17**

**NAMES AND TITLES**

**I. STATES**

1. 'United States' and 'US' may only be accepted as nouns in an unedited document.

**II. ORGANIZATIONS**

2. Some national bodies have adopted an official English version of their name, e.g. Japan Atomic Energy Research Institute. Where such official versions exist they should be used, except when they conflict with normal English usage, e.g. Institute of Nuclear Sciences 'Boris Kidrich' should be written as Boris Kidrič Institute of Nuclear Sciences, and Research Establishment Risø should be written as Risø Research Establishment.

**III. PERSONS**

3. British titles sometimes create problems. As the author of a scientific paper, Sir Edward Pochin, for example, would appear in the title block as E. POCHIN. A list of panel members or conference participants, however, should include the title and the first name in full; the respective forms would be Sir Edward Pochin and Pochin, Sir Edward (not Sir E.). In a verbatim discussion, the name would be written: POCHIN, E. In a report of a discussion the name and title would be given ("Sir Edward Pochin asked whether...").





# PREPARATION OF MANUSCRIPTS FOR PUBLICATION

1. Basic requirements for manuscripts intended for publication by the Agency are given on the MTC D web site on OASIS (see the How To sections for publishing). Detailed guidance on the presentation of, for example, references, tables, figures and footnotes will be found in the appropriate chapters of this manual.

## ***General principles***

2. The basic divisions of a publication, except for proceedings, are sections, and a single numbering sequence is used throughout the book, with the exception of annexes. Only in long, complex documents should the divisions be called chapters, with decimalized numbering beginning from 1 in each chapter. (See paras 1–3 in Chapter 7, Headings, Subheadings and Enumeration.)

## ***Title page***

3. The title page should contain the title of the work and, in the case of proceedings, details of the conference or other meeting. The original title of the meeting, the dates and the place where it was held are required. If the meeting was held jointly with another organization or if another organization co-sponsored the preparation of a work, this should be stated.

## ***Foreword***

4. A draft foreword should be submitted with the manuscript. It should be a brief statement, in general terms, of the justification for the work and its purpose, with the necessary acknowledgements to any bodies which provided financial assistance, arranged meetings, etc.

5. Where the work consists essentially of the results of panel or committee meetings and it is desired to mention the particular contribution of, for example, chairpersons of working groups, such an acknowledgement could be included in the foreword.

6. The names of the responsible staff members of the Agency may be given in the foreword.

7. If a long and detailed note is necessary to justify or explain the work, it should not be included in the foreword but should be made a separate introduction to the text.

## ***Contents list***

8. A contents list is required as a guide to the text and as a check that the manuscript is complete. The final contents list will be prepared by the editor. (See Chapter IV of the Editors' Supplement to the Style Manual.)

## ***Appendices and annexes***

9. Material which is subsidiary to the main text, and material included in support of statements in the main text or describing in detail methods of calculation, experimental procedures, etc., may be relegated to one or more appendices or annexes. (See Chapter X of the Editors' Supplement.)

***List of participants***

10. A list of participants in any committee or other meetings held in connection with the preparation of a report or a set of panel proceedings should be provided together with their affiliations and countries. Academic titles are not normally included. For conferences and symposia, the list of participants is prepared by the Conference Services Section. Lists of participants are treated in more detail in Chapter XIII of the Editors' Supplement.

***Figures, figure captions and tables***

11. Original figures, if any, must accompany the manuscript. Every figure must have a caption. It is the responsibility of the originator to obtain written permission from the respective copyright holders to reproduce figures and tables from other publications.

***Glossary***

12. If a glossary is considered necessary, care should be taken to ensure that the terms are consistent with those that have appeared in previous glossaries on the same subject, unless they have been intentionally amended. It is the responsibility of the originator to verify the definitions. (See Chapter XIV of the Editors' Supplement.)

***Indexes***

13. If a subject index is considered necessary, it is the responsibility of the author or originator to prepare it. All other indexes (author index, etc.) will be prepared by the editor. (See Chapter 13, Alphabetical Lists and Indexes.)

***Design for cover***

14. For proceedings and non-series publications the originator may suggest possible cover designs; these should be discussed with the editor and the Senior Graphic Artist in MTCD. (See also Chapter XVI of the Editors' Supplement.)

## Appendix A

### SI UNITS

SI base units are shown in bold type, SI derived units and non-SI units accepted for use with SI are shown in normal type, and additional units accepted for use with SI for the time being are shown in sans serif type.

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<i>Length</i>		<i>Radiation</i>	
<b>m</b>	<b>metre</b>	Bq	becquerel (dimensions: s <sup>-1</sup> )
Å	ångström (10 <sup>-10</sup> m)	Gy	gray (1 Gy = 1 J/kg)
		Sv	sievert
		Ci	curie (1 Ci = 3.7 × 10 <sup>10</sup> Bq)
<i>Area</i>		R	röntgen (1 R = 2.58 × 10 <sup>-4</sup> C/kg)
a	are (10 <sup>2</sup> m <sup>2</sup> )	rad	rad (1 rad = 0.01 Gy)
ha	hectare (10 <sup>4</sup> m <sup>2</sup> )	rem	rem (1 rem = 0.01 Sv)
b	barn (10 <sup>-28</sup> m <sup>2</sup> )		
		<i>Electricity and magnetism</i>	
<i>Volume</i>		<b>A</b>	<b>ampere</b>
L	litre	C	coulomb
		eV	electronvolt
<i>Mass</i>		F	farad
<b>kg</b>	<b>kilogram</b>	H	henry
t	tonne (10 <sup>3</sup> kg)	Hz	hertz (cycles per second)
u	unified atomic mass unit	Ω	ohm
		S	siemens (ohm <sup>-1</sup> )
		T	tesla
<i>Time</i>		V	volt
<b>s</b>	<b>second</b>	W	watt
min	minute	Wb	weber
h	hour		
d	day		
		<i>Others</i>	
<i>Temperature</i>		<b>cd</b>	<b>candela</b>
<b>K</b>	<b>kelvin</b>	<b>mol</b>	<b>mole</b>
°C	degree Celsius	J	joule
		lm	lumen
		lx	lux
<i>Pressure</i>	(Indicate absolute (abs) or gauge (g) as required, e.g. 304 kPa (g).)	N	newton
Pa	pascal (N/m <sup>2</sup> )	rad	radian
bar	bar (10 <sup>5</sup> Pa)	sr	steradian
		°	degree of angle
		'	minute of angle
		"	second of angle

---

APPENDIX A

**Prefixes for SI (and metric units)**

---

d	(deci)	$10^{-1}$	da	(deca)	$10^1$
c	(centi)	$10^{-2}$	h	(hecto)	$10^2$
m	(milli)	$10^{-3}$	k	(kilo)	$10^3$
$\mu$	(micro)	$10^{-6}$	M	(mega)	$10^6$
n	(nano)	$10^{-9}$	G	(giga)	$10^9$
p	(pico)	$10^{-12}$	T	(tera)	$10^{12}$
f	(femto)	$10^{-15}$	P	(peta)	$10^{15}$
a	(atto)	$10^{-18}$	E	(exa)	$10^{18}$
z	(zepto)	$10^{-21}$	Z	(zetta)	$10^{21}$
y	(yocto)	$10^{-24}$	Y	(yotta)	$10^{24}$

---

## Appendix B

### SYMBOLS OF THE ELEMENTS

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actinium	Ac	hafnium	Hf	promethium	Pm
aluminium	Al	helium	He	protactinium	Pa
americium	Am	holmium	Ho	radium	Ra
antimony	Sb	hydrogen <sup>a</sup>	H	radon	Rn
argon <sup>b</sup>	Ar	indium	In	rhenium	Re
arsenic	As	iodine <sup>c</sup>	I	rhodium	Rh
astatine	At	iridium	Ir	rubidium	Rb
barium	Ba	iron	Fe	ruthenium	Ru
berkelium	Bk	krypton	Kr	samarium	Sm
beryllium	Be	lanthanum	La	scandium	Sc
bismuth	Bi	lawrencium	Lr	selenium	Se
boron	B	lead	Pb	silicon	Si
bromine	Br	lithium	Li	silver	Ag
cadmium	Cd	lutetium	Lu	sodium	Na
caesium	Cs	magnesium	Mg	strontium	Sr
calcium	Ca	manganese	Mn	sulphur	S
californium	Cf	mendelevium	Md	tantalum	Ta
carbon	C	mercury	Hg	technetium	Tc
cerium	Ce	molybdenum	Mo	tellurium	Te
chlorine	Cl	neodymium	Nd	terbium	Tb
chromium	Cr	neon	Ne	thallium	Tl
cobalt	Co	neptunium	Np	thorium	Th
copper	Cu	nickel	Ni	thulium	Tm
curium	Cm	niobium	Nb	tin	Sn
dysprosium	Dy	nitrogen	N	titanium	Ti
einsteinium	Es	nobelium	No	tungsten	W
erbium	Er	osmium	Os	uranium	U
europium	Eu	oxygen	O	vanadium	V
fermium	Fm	palladium	Pd	xenon	Xe
fluorine	F	phosphorus	P	ytterbium	Yb
francium	Fr	platinum	Pt	yttrium	Y
gadolinium	Gd	plutonium	Pu	zinc	Zn
gallium	Ga	polonium	Po	zirconium	Zr
germanium	Ge	potassium	K		
gold	Au	praseodymium	Pr		

---

<sup>a</sup> D and T are the abbreviations for the hydrogen isotopes deuterium and tritium.

<sup>b</sup> A for argon is not accepted.

<sup>c</sup> J for iodine is not accepted.

## Appendix C

### THE GREEK ALPHABET

Capital	Lower case	Name
A	<i>α</i>	alpha
B	<i>β</i>	beta
Γ	<i>γ</i>	gamma
Δ	<i>δ</i>	delta
E	<i>ε</i>	epsilon
Z	<i>ζ</i>	zeta
H	<i>η</i>	eta
Θ	<i>θ</i>	theta
I	<i>ι</i>	iota
K	<i>κ</i>	kappa
Λ	<i>λ</i>	lambda
M	<i>μ</i>	mu
N	<i>ν</i>	nu
Ξ	<i>ξ</i>	xi
O	<i>ο</i>	omicron
Π	<i>π</i>	pi
P	<i>ρ</i>	rho
Σ	<i>σ</i>	sigma
T	<i>τ</i>	tau
Υ	<i>υ</i>	upsilon
Φ	<i>φ</i>	phi
X	<i>χ</i>	chi
Ψ	<i>ψ</i>	psi
Ω	<i>ω</i>	omega

**Note:** Lower case Greek letters are normally set in italics (as in the list above) and upper case Greek letters in normal type. Exceptions to this are  $\mu$  when written with a unit (e.g.  $\mu\text{m}$ ,  $\mu\text{Gy}$ ), and Greek letters in the names of particles and radiation (e.g.  $\alpha$  particle,  $\beta$  decay,  $\gamma$  ray) and in chemical names (e.g.  $\beta$ -butadiene). To insert Greek characters in Word, the “Insert/Symbol” feature should be used, and in the dialogue boxes under “Symbols”, the font “normal text” should be selected. The font should not be set to “Symbol”.

## Annex

### STYLE GUIDELINES FOR AGENCY TEXTS

The following text summarizes Agency style with respect to certain issues that frequently arise in the drafting of Agency documents and publications. It is available on OASIS at <http://oasis.iaea.org/MTCD/StyleGuidelines.pdf?menuid=669> and is presented here for easy reference.

These guidelines should be followed in preparing documents for the Policy-Making Organs (PMO), documents for external or internal communication, web pages and publications.

#### Format

- Use the appropriate template for documents.
- Use single, not double, spaces after full stops and colons.
- Use tabs, not the space bar, to position text on the page.
- Numbers of five or more digits are blocked off in groups of three with spaces instead of commas, e.g. 10 000, not 10,000, in accordance with the International System of Units.
- Write US dollar amounts in the form \$145 000 (not US\$145 000).
- Use italics (not quotation marks) for the titles of documents and publications.
- Use the en dash (Ctrl + minus sign on numerical keypad) without spaces either side for ranges of numbers or dates (e.g. 2002–2003).
- Use the em dash (Ctrl + Alt + minus sign on numerical keypad) with spaces either side for a parenthetical long dash.

#### Text

- In general, use spelling as laid down in the latest edition of the Concise Oxford English Dictionary (currently the eleventh edition), e.g. labour, not labor; centre, not center; organize, not organise; analyse, not analyze. If two versions are given, use the first one rather than a variant spelling. Cooperation and coordination and associated words should be written without a hyphen.
- Use abbreviations in accordance with the Glossary of Abbreviations and Acronyms (see OASIS/About IAEA/Acronyms).
- Reserve capitalization for proper names and titles (e.g. technical cooperation programme should not have initial capitals because it is not the actual title of the programme; safeguards agreement when used generically and not as part of the full title of a specific agreement should also not have initial capitals). Capitalization is, however, used to indicate that reference is being made to terms that pertain to the Agency (e.g. Secretariat, Member States).
- In PMO documents use the Agency, not the IAEA, except in proper names or for clarity. In publications use the IAEA.
- Distinguish where necessary between the Secretariat and the Agency (which is the Secretariat plus the Member States).
- Avoid the mention of individual Units, Sections, Divisions or Departments of the Agency.
- Member States' names should usually be written out in full (see the latest version of INFCIRC/2), although after their first use some States may be referred to by their abbreviations (e.g. DPRK or USA (as a noun) and US (as an adjective)). Member States should usually be listed in alphabetical order.
- The names of States are regarded as singular nouns of neuter gender, e.g. The United States of America has (not have) its (not their) own system.
- In PMO documents, insert the word document before document symbols (e.g. document GOV/2004/1).
- In PMO documents write out the names of isotopes in the text: uranium-238, technetium-99m; the short form should be written as: <sup>238</sup>U, <sup>99m</sup>Tc. In tables, etc., the form U-238, Tc-99m may be used.
- Dates should normally be written in the form 24 July 2004, except in tables, etc., where they may be written 2004-07-24.
- Use bold, not underlining or italics, for emphasis.
- Double quotation marks should be reserved for actual quotations. Single quotation marks should be used upon first use of a word or short phrase that either is out of context or is unfamiliar.





EDITORS' SUPPLEMENT  
TO THE IAEA STYLE MANUAL  
FOR PUBLICATIONS AND DOCUMENTS  
IN ENGLISH

2005 EDITION



## FRONT MATTER (INCLUDING FOREWORD AND EDITORIAL NOTE)

1. The title of the work and, where applicable, details of the meeting are taken from the manuscript provided by the Scientific Secretary. If there is a discrepancy between the manuscript and what appears in the Publications Committee Proposal and the Work Assignment Slip it should be taken up with the Chief Editor and the Publications Assistant; changes (e.g. improving the title) can only be made at this stage in consultation with them. Any change to the title must be agreed with the Scientific Secretary and reported to the Publications Assistant.
2. *Inside front cover.* If a caption is required for a cover picture it is set in 9 point sanserif type (Univers) on the inside front cover. The editor should draft a suitable text. Example 1 shows the text that appears on the inside front cover of safety related publications.
3. *p. (i): Half-title page.* Title of publication, with volume number if there is more than one volume, in 12 point medium capitals, centred (see examples 2 and 3). The title layout should be identical to that on the title page (see para. 5).
4. *p. (ii):* List of Member States, unless the publication or meeting is jointly organized with another international organization. The editor should check that the list includes any recent changes and additions. The Member States are set in 7 point and the rest of the page in 8 point.
5. *p. (iii): Title page* (see examples 5–7). The top line is set in 12 point medium capitals. For example:

TECHNICAL REPORTS SERIES No. 419

or

IAEA SAFETY STANDARDS SERIES No. WS-R-3

or

PROCEEDINGS SERIES

The title is normally typed in 20 point medium capitals. The words should be arranged into a set of lines with a balanced appearance, with prepositions beginning rather than ending lines if possible. The ‘description’ piece after the title should be similarly divided. In proceedings it is typed in 10 point capitals. The statement of the number of volumes (in 10 point italics) and the volume number (and title) in 16 point medium capitals should be added for multivolume works. The volume numbers are in Arabic numerals. The word VOLUME is written in full. Subtitles of Technical Reports, etc., should be in 16 point lower case and other descriptive material in either 10 or 12 point capitals, as appropriate (see examples 6 and 7).

6. *p. (iv):* The copyright notice is set automatically (in 10 point). The copyright and printing lines, the date and the IAEA book reference number appear in 8 point, followed by

the Cataloguing in Publication Data, also in 8 point (see example 8). Special notes, if any (in 10 point capitals), can also be accommodated on this page.

7. *p. (v): Foreword.* Forewords of proceedings must be checked with the Head of the Conference Services Section for acknowledgements to co-sponsors, hosts, etc. It is sufficient to give a general indication of the numbers of papers and participants, e.g. “about seventy”, “more than two hundred”, rather than exact numbers. Scientific Secretaries should be asked whether any financial contributions are to be acknowledged. If a draft foreword has been heavily edited, the final draft should be cleared by the Scientific Secretary. All forewords are finally cleared by the Chief Editor on behalf of the Director General. The heading is in 12 point bold capitals.

8. Although acknowledgements should normally be included in the foreword, if the number of individuals and organizations to be thanked is substantial, the acknowledgements may be printed under a 12 point bold capital heading immediately after the foreword (on the same or a new page).

9. *Editorial note.* For each publication the editor should consider whether an editorial note (in 9 point italics) is required. This may include, in addition to any special information relevant to the publication, the disclaimers shown on p. 105. In deciding which paragraphs are appropriate for a particular publication, it is better to include more than may be strictly necessary rather than too few.

10. The editorial note is placed either at the bottom of the last page occupied by the foreword (or acknowledgements section) or at the bottom of the next new page.

10° italic

*EDITORIAL NOTE*

9° italic

*The Proceedings have been edited by the editorial staff of the IAEA to the extent considered necessary for the reader's assistance. The views expressed remain, however, the responsibility of the named authors or participants. In addition, the views are not necessarily those of the governments of the nominating Member States or of the nominating organizations.*

*Although great care has been taken to maintain the accuracy of information contained in this publication, neither the IAEA nor its Member States assume any responsibility for consequences which may arise from its use.*

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*Material prepared by authors who are in contractual relation with governments is copyrighted by the IAEA, as publisher, only to the extent permitted by the appropriate national regulations.*

*Example 1: Inside front cover for safety related publications***IAEA SAFETY RELATED PUBLICATIONS****IAEA SAFETY STANDARDS**

Under the terms of Article III of its Statute, the IAEA is authorized to establish or adopt standards of safety for protection of health and minimization of danger to life and property, and to provide for the application of these standards.

The publications by means of which the IAEA establishes standards are issued in the **IAEA Safety Standards Series**. This series covers nuclear safety, radiation safety, transport safety and waste safety, and also general safety (i.e. all these areas of safety). The publication categories in the series are **Safety Fundamentals, Safety Requirements and Safety Guides**.

Safety standards are coded according to their coverage: nuclear safety (NS), radiation safety (RS), transport safety (TS), waste safety (WS) and general safety (GS).

Information on the IAEA's safety standards programme is available at the IAEA Internet site

<http://www-ns.iaea.org/standards/>

The site provides the texts in English of published and draft safety standards. The texts of safety standards issued in Arabic, Chinese, French, Russian and Spanish, the IAEA Safety Glossary and a status report for safety standards under development are also available. For further information, please contact the IAEA at P.O. Box 100, A-1400 Vienna, Austria.

All users of IAEA safety standards are invited to inform the IAEA of experience in their use (e.g. as a basis for national regulations, for safety reviews and for training courses) for the purpose of ensuring that they continue to meet users' needs. Information may be provided via the IAEA Internet site or by post, as above, or by e-mail to [Official.Mail@iaea.org](mailto:Official.Mail@iaea.org).

**OTHER SAFETY RELATED PUBLICATIONS**

The IAEA provides for the application of the standards and, under the terms of Articles III and VIII.C of its Statute, makes available and fosters the exchange of information relating to peaceful nuclear activities and serves as an intermediary among its Member States for this purpose.

Reports on safety and protection in nuclear activities are issued in other publications series, in particular the **Safety Reports Series**. Safety Reports provide practical examples and detailed methods that can be used in support of the safety standards. Other IAEA series of safety related publications are the **Provision for the Application of Safety Standards Series**, the **Radiological Assessment Reports Series** and the International Nuclear Safety Group's **INSAG Series**. The IAEA also issues reports on radiological accidents and other special publications.

Safety related publications are also issued in the **Technical Reports Series**, the **IAEA-TECDOC Series**, the **Training Course Series** and the **IAEA Services Series**, and as **Practical Radiation Safety Manuals** and **Practical Radiation Technical Manuals**. Security related publications are issued in the **IAEA Nuclear Security Series**.

**FRONT MATTER**

*Example 2: p. (i) (Half-title page)*

12°C

**SAFE OPERATION  
OF NUCLEAR POWER PLANTS**

**VOLUME 1**

*Example 3: p. (i) (Half-title page)*

12°C

PREPAREDNESS AND RESPONSE  
FOR A NUCLEAR OR  
RADIOLOGICAL EMERGENCY



## FRONT MATTER

### *Example 4: p. (ii)*

The following States are Members of the International Atomic Energy Agency:

AFGHANISTAN	GREECE	PAKISTAN
ALBANIA	GUATEMALA	PANAMA
ALGERIA	HAITI	PARAGUAY
ANGOLA	HOLY SEE	PERU
ARGENTINA	HONDURAS	PHILIPPINES
ARMENIA	HUNGARY	POLAND
AUSTRALIA	ICELAND	PORTUGAL
AUSTRIA	INDIA	QATAR
AZERBAIJAN	INDONESIA	REPUBLIC OF MOLDOVA
BANGLADESH	IRAN, ISLAMIC REPUBLIC OF	ROMANIA
BELARUS	IRAQ	RUSSIAN FEDERATION
BELGIUM	IRELAND	SAUDI ARABIA
BENIN	ISRAEL	SENEGAL
BOLIVIA	ITALY	SERBIA AND MONTENEGRO
BOSNIA AND HERZEGOVINA	JAMAICA	SEYCHELLES
BOTSWANA	JAPAN	SIERRA LEONE
BRAZIL	JORDAN	SINGAPORE
BULGARIA	KAZAKHSTAN	SLOVAKIA
BURKINA FASO	KENYA	SLOVENIA
CAMEROON	KOREA, REPUBLIC OF	SOUTH AFRICA
CANADA	KUWAIT	SPAIN
CENTRAL AFRICAN REPUBLIC	KYRGYZSTAN	SRI LANKA
CHILE	LATVIA	SUDAN
CHINA	LEBANON	SWEDEN
COLOMBIA	LIBERIA	SWITZERLAND
COSTA RICA	LIBYAN ARAB JAMAHIRIYA	SYRIAN ARAB REPUBLIC
CÔTE D'IVOIRE	LIECHTENSTEIN	TAJIKISTAN
CROATIA	LITHUANIA	THAILAND
CUBA	LUXEMBOURG	THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA
CYPRUS	MADAGASCAR	TUNISIA
CZECH REPUBLIC	MALAYSIA	TURKEY
DEMOCRATIC REPUBLIC OF THE CONGO	MALI	UGANDA
DENMARK	MALTA	UKRAINE
DOMINICAN REPUBLIC	MARSHALL ISLANDS	UNITED ARAB EMIRATES
ECUADOR	MAURITANIA	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND
EGYPT	MAURITIUS	UNITED REPUBLIC OF TANZANIA
EL SALVADOR	MEXICO	UNITED STATES OF AMERICA
ERITREA	MONACO	URUGUAY
ESTONIA	MONGOLIA	UZBEKISTAN
ETHIOPIA	MOROCCO	VENEZUELA
FINLAND	MYANMAR	VIETNAM
FRANCE	NAMIBIA	YEMEN
GABON	NETHERLANDS	ZAMBIA
GEORGIA	NEW ZEALAND	ZIMBABWE
GERMANY	NICARAGUA	
GHANA	NIGER	
	NIGERIA	
	NORWAY	

The Agency's Statute was approved on 23 October 1956 by the Conference on the Statute of the IAEA held at United Nations Headquarters, New York; it entered into force on 29 July 1957. The Headquarters of the Agency are situated in Vienna. Its principal objective is "to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world".

*Example 5: p. (iii) (Title page)*

12°C

PROCEEDINGS SERIES

20°C

**SAFE OPERATION  
OF NUCLEAR POWER PLANTS**

10°C

PROCEEDINGS OF AN INTERNATIONAL SYMPOSIUM  
ON SAFE OPERATION OF NUCLEAR POWER PLANTS  
ORGANIZED BY THE  
INTERNATIONAL ATOMIC ENERGY AGENCY  
AND HELD IN MUNICH, 16–20 APRIL 1984

10° italic

*In two volumes*

16°C

**VOLUME 1  
THE HUMAN–MACHINE INTERFACE**

10°C

INTERNATIONAL ATOMIC ENERGY AGENCY  
VIENNA, 1984

*Example 6: p. (iii) (Title page)*

12°C

IAEA SAFETY STANDARDS SERIES No. GS-R-2

20°C

**PREPAREDNESS AND RESPONSE  
FOR A NUCLEAR OR  
RADIOLOGICAL EMERGENCY**

12°C

**SAFETY REQUIREMENTS**

10°C

JOINTLY SPONSORED BY THE  
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PAN AMERICAN HEALTH ORGANIZATION,  
UNITED NATIONS OFFICE FOR THE CO-ORDINATION OF  
HUMANITARIAN AFFAIRS  
AND WORLD HEALTH ORGANIZATION

10°C

INTERNATIONAL ATOMIC ENERGY AGENCY  
VIENNA, 2002

*Example 7: p. (iii) (Title page)*

20°C

**PROMOTION AND FINANCING OF  
NUCLEAR POWER PROGRAMMES  
IN DEVELOPING COUNTRIES**

12°C

**REPORT TO THE IAEA  
BY A SENIOR EXPERT GROUP**

10°C

**INTERNATIONAL ATOMIC ENERGY AGENCY  
VIENNA, 1987**

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3. Radiation — Safety measures. I. International Atomic Energy  
Agency. II. Series.

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## SEPARATOR PAGES

1. Separator pages should be prepared in good time so that they are available when pagination begins. They should be typeset in separate files.

### A. PROCEEDINGS

2. The system of numbering sessions need not be the same as that used in the conference programme (Arabic or Roman numerals or capital letters), i.e. the numbers may be altered for the proceedings. Arabic numerals are preferred.

3. The separator page bears the title of the session, with the session number underneath in brackets. Both the title and the session number are typed in 12 point medium. Then follow the name of the chairperson and the designating Member State or organization; these lines are in 10 point. The name of the Member State or organization is not bold, in contrast to 'Chairperson' and the name of the chairperson.

*Example 1*

12°C

PROTECTION SYSTEMS

12°

(Session 3)

10° bold

**Chairpersons**

10°C bold

**B. TAGLIATI**

10°

Italy

**A.J. STIRLING**

Canada

4. If more than one session at the meeting is devoted to the same subject, only one session number and one separator page are required in the proceedings.

5. Editors should use their discretion in deciding whether a special presentation, e.g. a keynote address, requires its own separator page (see Chapter V, Section C).

6. More examples of separator pages follow.

*Example 2*

12°C USE OF GENETIC VARIATION DERIVED  
BY IN VITRO CULTURE

12° italic *Introductory comments and discussion*  
12° (Session 6)

10° bold **Chairperson**  
10°C bold **A.H. ZAKRI**  
10° Malaysia

**Co-Chairperson**  
**S. DASKALOV**  
IAEA

*Example 3*

12°C SPENT FUEL MEASUREMENTS

12° (Session 7)

10° bold **Chairperson**  
10°C bold **Yu.I. KONNOV**  
10° Russian Federation

10° italic *Papers IAEA-SM-231/12, 66, 87, 110 and 134 were presented  
by R. Arlt as Rapporteur*

**B. TECHNICAL REPORTS, IAEA SAFETY STANDARDS SERIES,  
ETC.**

7. Whether or not Technical Reports, etc., have separator pages depends on the structure of the publication and is a matter for the editor's discretion (see Chapter IX, Headings and Subheadings). If there is a chairperson or a working group, or if the committee members are not listed at the end of the book, their names could also be given on the separator page (or the verso side). Otherwise, layout is as for proceedings.



## RUNNING HEADS

1. Running heads are not obligatory in shorter and structurally simpler publications. IAEA Safety Standards Series publications, for example, do without them. However, if the text is divided into chapters (each of which starts on a new right hand page), running heads are necessary.

2. Conference proceedings have the author's name on the left hand page and the serial number of the paper on the right hand page. If no numbers were originally assigned to the papers, short titles are required (maximum length 50 characters, including spaces).

	<i>Left hand page</i>	<i>Right hand page</i>
8° bold	<b>DE MONTMOLLIN</b>	<b>IAEA-SM-251/13</b>
	<b>WAGNER and BECKER</b>	<b>IAEA-CN-41/A-3</b>
	<b>BOLSHOV et al.</b>	<b>LOCATING AND RECOVERING ORPHAN SOURCES</b>

All running heads are centred, except on the title page of a paper, where the paper number, if any, is set at the top right hand corner.

3. Panel proceedings follow the same system. Reports and summaries in such proceedings may have their own appropriate headings.

4. Where running heads are needed for a long or structurally complex publication, then, for example, chapter and section numbers, each followed by a short title, may be used for the left and right hand pages, respectively, if the sections are long enough for this to be appropriate:

	<i>Left hand page</i>	<i>Right hand page</i>
8° bold	<b>CHAPTER 1. GENERAL INTRODUCTION</b>	<b>1.3. RADIATION PROTECTION</b>

If the chapters are long but the sections comparatively short, then the chapter number and short title may be used separately for left and right hand pages, respectively (see example 4 in Chapter IX, Headings and Subheadings). If the original titles are difficult to reduce, the Scientific Secretary should be asked to provide a list of running heads. (It is in any case advisable to ask the Scientific Secretary to approve a list of short titles.) Examples of running heads for different kinds of Technical Report are given in Chapter IX.



## CONTENTS LIST

1. The details in the contents list (titles, headings, authors, page numbers, etc.) must be exactly the same as in the body of the book, although the typeface need not be identical.
2. The main heading is as follows:

12° bold

**CONTENTS**  
or  
**CONTENTS OF VOLUME 2**

**Note:** The volume number is in Arabic numerals, and the word VOLUME is written in full.

### **A. PROCEEDINGS**

#### ***Session titles***

3. Session titles are set at the margin as follows:

**APPROACHES TO SAFEGUARDS (Session 2)**

10° bold

A page number is not given. An extra line space is left between the session title and the list of paper titles.

#### ***Paper titles***

4. Titles are set in 10 point lower case, starting at the margin, with subsequent lines indented two spaces (1 pica). A colon divides the main title from the subtitle if there is no dividing punctuation between the title and subtitle in the book (the subtitle begins with an initial capital). The paper number (in parentheses) follows the title. A row of dots leads to the page number.
5. The terms Abstract, Summary, etc., should be added in italics in parentheses if they appear after the title in the book (see example 1 at the end of this chapter and Chapter VII, Summaries).
6. The terms Invited Paper and Invited Review Paper appearing above the title of a paper in the book should not be included in the contents list.
7. Titles of papers (and of summaries) in alphabets other than the Latin are translated into English. The translation, followed by a colon and the transliterated names of all the authors, is set in 10 point lower case italics, in parentheses, and indented two spaces on a new line immediately under the authors' names in the original language (see example 1).
8. Titles in French and Spanish are not translated.

**Authors' names**

9. Authors' names are set in 10 point lower case italics immediately under the title, and indented two spaces.

**Discussions and summaries**

10. For (the summary of) a discussion of a particular paper, the word Discussion is indented on a new line immediately under the author's name and followed by a row of dots leading to the page number. When a discussion covers a sequence of papers, the word is not indented and has no line space above (see example 2).

11. Summaries of sessions or panel discussions are listed after an extra line space against the margin (see example 2).

**Posters**

12. If a whole session is devoted to posters, the title takes the form of a normal session title:

POSTER SESSION

10° C bold

or

DOSIMETRY TECHNIQUES (Poster Session 3)

The authors and titles are set out in the same way as those for orally presented papers. The numbers assigned to posters, whether these are in summary form or complete papers, should end with a capital P.

13. If summary posters are placed in the proceedings at the ends of sessions, their titles appear after the heading **Poster presentations** (see example 1).

**Lists and indexes**

14. Names of lists and indexes are set without spaces between lines and with initial capitals. The first line is preceded by a line space.

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Index of Papers ( <i>and Posters</i> ) by Number .....	553

15. Note from the example that each list starts on a right hand page.

**B. TECHNICAL REPORTS, IAEA SAFETY STANDARDS SERIES, ETC.**

16. In the contents list of a document with decimal enumeration, headings of different orders are given different indentations to clarify the enumeration (see example 3).

17. Section or chapter headings which are centred in the book should be set in the contents list in 10 point medium capitals, whether they are followed by subheadings or not (see example 3). The page number should be given and there is an extra line space before the subheadings. If the main divisions of a book are called parts, the part headings in the contents list are in 10 point bold capitals and are not followed by a page number (see example 4).

## CONTENTS LIST

18. When decimal enumeration of subheadings reaches three digits and the numbered subsections are very short (e.g. two or three on the same page), they may, at the editor's discretion, be listed without page numbers or even omitted.

19. If the paragraphs of a publication are numbered, as in Safety Requirements, the first and last paragraph numbers in each section should be given in parentheses after the section heading. In such publications normally only the main headings are numbered (see example 5).

### **C. APPENDICES AND ANNEXES**

20. Appendices and annexes are listed with their titles in capitals (see example 3).

21. Appendices and annexes usually appear before and after the main list of references, respectively.

*Example 1: Proceedings containing summary posters***CONTENTS OF VOLUME 1****AN ASSESSMENT OF EXISTING SAFEGUARDS (Session 1)**

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# PAPER TITLES, AUTHORS' NAMES AND AFFILIATIONS (TITLE BLOCK)

## A. PAPER TITLES

1. Titles are set in 12 point bold capitals and indented. They should be as short as possible, without unnecessary articles, and divided into lines according to the following principles:

- New lines should start at logical points.
- Layout should be pleasing to the eye.
- There should be no more than 40 characters on a line (including spaces).

2. There is no full stop at the end of a title. Subtitles start with an initial capital on a new line and are set in 12 point lower case bold italics. There is no punctuation between title and subtitle; the change of typeface is all that is necessary.

3. If appropriate, the title can be preceded by a special heading (e.g. **Invited Paper**, **Invited Review Paper**) in 12 point bold lower case:

8°C bold	IAEA-SM-206/47
<b>Invited Paper</b>	12° bold
<b>STRATOSPHERIC POLLUTION BY AIRCRAFT AND ROCKETS</b>	12°C bold
<i>An empirical assessment of the risks</i>	12° bold italic
F.S. HOWLAND	10°C
Institute for Studies of the Upper Atmosphere,	10°
Pleasantown, California,	
United States of America	

4. When the paper is presented by someone who is not an author of the paper, the title should be followed by: *Presented by A.N. Otter* in 10 point lower case italics on the same indent as the rest of the title block (see next example).

5. Latin names that would be set in italics in the text should appear in lower case bold italics in the title:

8°C bold	IAEA-SM-142/14
<b>CADMIUM TOXICITY IN ADULTS OF THE MUSSEL <i>Mytilus galloprovincialis</i> Lam.</b>	12°C bold
A. DIVER, U.C. FISH	10°C
Food and Agriculture Organization	10°
of the United Nations,	
Rome	
<i>Presented by A.N. Otter</i>	10° italic

## B. AUTHORS' NAMES AND AFFILIATIONS

6. The normal arrangement for authors and affiliations is as follows:

A. JOUZEL  
 Département de physico-chimie,  
 CEA, Centre d'études de Saclay,  
 Gif-sur-Yvette, France  
 Email: jouzela@ceasaclay.fr

J. BEER, M. ANDRÉE  
 Physics Institute,  
 University of Berne,  
 Berne, Switzerland

When the names of the town and the country are short enough, they can be placed on the same line. Lines should not normally exceed 45 characters (including spaces).

- Notes:**
- (1) Smaller units are written before larger ones (as in postal addresses; see Chapter XIII, List of Participants and List of Contributors to Drafting and Review).
  - (2) Affiliations in French follow the French rules for initial capitals (see para. 15 of Chapter 17, Names and Titles). Accents in French surnames should be retained even with capital letters.
  - (3) The town must be given separately even if it is included in the name of the institute.
  - (4) The email address of one author (normally but not necessarily the first author) may be included if the author supplied it in the affiliation.

7. If all the authors are from the same country but there is more than one affiliation, the name of the country should be written only once, after the final affiliation, and separated from the name of the town by an extra line space. No comma is then required after the name of the town in each affiliation:

C. YAMANAKA, S. NAKAI, T. YAMANAKA  
 Institute of Laser Engineering,  
 Osaka University,  
 Osaka

K. OGAWA, Y. MAEJIMA, T. SHIMADA  
 Electrotechnical Laboratory,  
 Sakura, Ibaraki  
 Email: y.maejima@etl.jp

Japan

For Australia, the USA, Canada and the United Kingdom, where the affiliation includes the name of the state/province/county, this name should follow the name of each town even when all the towns in the title block are in the same state/province/county (i.e. this name may not be treated like the country name).

## TITLE BLOCK

8. If all the authors are from the same town but from different institutes, the name of the town need only appear once:

M. SUEHIRO  
Tokyo Metropolitan Geriatric Hospital  
Email: suehiro.m@tmgh.jp

F. YOKOI  
National Centre for Nervous, Mental  
and Muscular Disorders

T. NOZAKI, K.M. KUBO, M. IWAMOTO  
Institute of Physical and Chemical Research

Tokyo, Japan

Should all the authors be from the same institute but different departments, the name of the institute should be given in every case.

9. For authors whose ‘given’ names are not abbreviated (e.g. Chinese names), these names have an initial capital only:

Chengyao SHEN, Huifen WEN, Wenzhong ZHENG,  
Yuetang ZHAO, Minghua TANG  
Institute of Radiation Medicine,  
Beijing, China

10. There is a comma between a surname and Jr. (e.g. H. JAMES, Jr.). There is no comma between a surname and, for example, III.

11. No change in the order of listing authors and no major change in a title may be made without the agreement, preferably in writing or as an initialled draft, of the principal author. Where authors are listed in an order that would require the name of an institute to be repeated, and if the authors insist on keeping to that order, the following arrangement can be adopted (cf. example in para. 6):

M. ANDRÉE\*, A. JOUZEL\*\*, J. BEER\*

\* Physics Institute,  
University of Berne,  
Berne, Switzerland

\*\* Département de physico-chimie,  
CEA, Centre d’études de Saclay,  
Gif-sur-Yvette, France  
Email: jouzela@ceasaclay.fr

Note that these affiliations are not footnotes and are typed in 10 point. The asterisks are to the left of the indent. Note the extra line space after the authors’ names and between the affiliations in the above style.

12. The names of institutes in affiliations should be in English unless submitted in another language; consistency within the book should be borne in mind. The names of towns and countries should be written in English. The official names of countries, in the accepted English form, must follow Agency usage (see the correspondence instructions on OASIS).

13. The affiliation should contain no unnecessary details (no street numbers or postal codes, for example) and should be compressed into as few lines as possible without crowding. For Australia, the USA and Canada, names of states or provinces should be included, written in full, except for N.Y. when following the city New York and D.C. (for both of which full stops are required when they appear in an affiliation but not when they are part of zip codes in a list of participants). For the United Kingdom, the names of counties should be written in full (for example, the abbreviation Oxon. should not be used for Oxfordshire). For affiliations in England, Northern Ireland, Scotland and Wales the country should be given as 'United Kingdom'.

14. For international organizations the names of countries are not given (see example in para. 5).

15. If, in an exceptional case, there are an unusually large number of authors and affiliations, they may be typed in 9 point with institute, town and country lines run on if they would otherwise not fit on the title page (see also para. 22).

### C. OTHER KINDS OF TITLE BLOCK

16. When introductory and closing speeches, and other presentations that are not scientific papers, are to be published, the title block is centred. The special heading (e.g. Keynote Address) is set in 12 point capital italics; the title (if any) of the presentation in 12 point bold capitals, as usual; the author's name in 10 point bold lower case; and the affiliation in 10 point medium lower case, as usual:

12°C italic	<i>KEYNOTE ADDRESS</i>
12°C bold	<b>ARE WE READY TO CONSTRUCT AND OPERATE AN UNDERGROUND REPOSITORY?</b>
10° bold	<b>K. Kuhn</b>
10°	Institut für Tieflagerung, Gesellschaft für Strahlen- und Umweltforschung mbH München, Braunschweig, Germany

17. The title block of the summary of a discussion is also centred:

12°C bold	<b>PANEL</b>	
	<b>FUTURE DEVELOPMENT OF THE NUSS PROGRAMME</b>	
10° italic	10° bold	10°
<i>Chairperson:</i>	<b>W.S. Gronow</b> (United Kingdom)	
<i>Members:</i>	<b>J. Pachner</b> (Canada)	
	<b>H. Rabold</b> (Germany)	
	<b>A.P. Vuorinen</b> (Finland)	
	<b>Shihchen Xu</b> (China)	
<i>Scientific Secretary:</i>	<b>E. Iansiti</b> (IAEA)	

## D. FOOTNOTES

18. Footnotes to the title block appear at the bottom of the page and are typed in the same way as numbered footnotes to the text (see Chapter 12, Footnotes).

19. The sequence of symbols for footnotes to the title block is: \*, \*\*, \*\*\*, +, ++, +++, \$, \$\$, \$\$\$, #, # #, # # #. Daggers should not be used with names unless to indicate that an author is deceased, nor should they be used with titles. (See example in para. 21.)

20. An address in a footnote should include the country even if it is the same as that in the affiliation; US states should be written in full if there is no zip code, as should also, for example, Canadian provinces and Australian states.

21. Examples of footnotes to the title block are given below:

---

\* Research sponsored by the Office of Fusion Energy, US Department of Energy, under contract DE-AC05-84OR21400 with Martin Marietta Energy Systems, Inc.

\*\* Present address: Max-Planck-Institut für Plasmaphysik, Boltzmannstrasse 2, 85748 Garching, Germany.

† Deceased.

\*\*\* Supported by AT&T Bell Laboratories, Murray Hill, New Jersey, USA.

+ Present address: Plasma Physics Laboratory, Princeton University, P.O. Box 451, Princeton, NJ 08544, USA.

++ Present address: Institute for Fusion Studies, University of Texas, Austin, TX 78712, USA.

22. For papers with a great many authors only the main affiliation is typed after the authors' names; the other affiliations are typed as numbered footnotes. Examples of footnotes to such a title block are given below (note that the second line has been indented in this particular case for aesthetic reasons):

---

\* Research sponsored by the Office of Fusion Energy, US Department of Energy, under contract W-7405-eng-26 with the Union Carbide Corporation.

<sup>1</sup> Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

<sup>2</sup> Lawrence Livermore National Laboratory, Livermore, California, USA.

<sup>3</sup> FEDC/University of Michigan, Ann Arbor, Michigan, USA.

<sup>4</sup> FEDC/General Electric Company, Schenectady, New York, USA.

<sup>5</sup> Plasma Physics Laboratory, Princeton University, Princeton, New Jersey, USA.

<sup>6</sup> General Atomics, San Diego, California, USA.

## E. SUMMARY POSTERS

23. Title blocks of summary posters are treated in a different way from those of papers, and are described in Chapter VIII.





## ABSTRACTS

1. The editor should check that the abstract (300 words maximum) presents a reasonable, informative account of the paper. It must be intelligible without reference to the main text, and should not include information that is not in the paper itself.
2. In proceedings the abstract, in 9 point, appears after the title block. The heading 'Abstract', in 10 point bold, is set on the paragraph indent.
3. Only the first line of the text of the abstract is indented. If, exceptionally, the abstract is extremely long or if the paper is divided into, for example, Parts I and II, more than one paragraph is acceptable. Otherwise an abstract must consist of a single paragraph.
4. A non-English abstract is preceded by its English translation. The heading is then, for example, **Abstract–Résumé**, **Abstract–Resumen** or **Abstract–Аннотация**.
5. Abstracts should not contain any reference citations or displayed equations. The word 'we' may not be used. The term 'the paper' should be written instead of 'this paper'.

### *Example*

#### **Abstract**

10° bold

Several research establishments involved in R&D for international safeguards have been investigating the possibility of using the 'ultrasonic signature' principle to identify uniquely such items as containers and fuel elements or bundles. The ways in which general principles are applied appear to be very different. A careful systems analysis shows that the solution chosen can be inserted into a general scheme, resulting in three major approaches involving only two different families of electronic devices for the identity, pick-up and treatment.



## SUMMARIES

1. If it is agreed with an author that only a summary will be published in a set of proceedings, the copyright remains with the author, who is free to publish the complete paper elsewhere. It is preferable to call such an account a summary rather than an extended synopsis (even if taken from the book of extended synopses), but the author's wishes should be followed. The summary is set in 10 point.
2. If a presented paper has already been published or will be published elsewhere, only the abstract should appear (in 9 point) in the proceedings. A footnote should give details of where and when the full paper was or will be published.
3. Figures, tables and references may be included in a summary, but the limits to length must be made clear to the author by the Scientific Secretary at an early stage after agreement has been reached with the Publishing Section.
4. Summaries of oral presentations that appear among a group of papers in the proceedings each start on a new right hand page and have the same running heads and title block as a paper, except that the word 'Summary', in italics, is set in parentheses immediately below the title:

8°C bold

IAEA-CN-41/W-10

**RECENT RESULTS FROM  
THE ROTAMAK EXPERIMENTS**  
*(Summary)*

12°C bold

12° italic

5. A group of consecutive summary posters, in contrast, are run on. Their titles are in 10 point (not 12 point) bold capitals and their title blocks are not indented (see Chapter VIII, para. 8).
6. For a group of summary posters the left and right hand running heads are POSTER SESSION or POSTER PRESENTATIONS in 8 point bold capitals (see Chapter VIII, paras 7 and 8).
7. A summary of an oral presentation appears in the contents list as follows:  

Recent results from the Rotamak experiments (*Summary*)  
(IAEA-CN-41/W-10) ..... 367  
*G. Durance, I.R. Jones, J. Tendys, M. Turley*
8. A listing of summary posters in the contents list is shown in example 1 of Chapter IV.



## POSTERS

1. Posters may be either summaries or complete reports of work that are not presented orally but are displayed on boards at a conference.
2. The editor must check that all posters listed in the programme are indeed displayed at the conference. Posters that are not displayed will not be published in the proceedings. On the other hand, it is not obligatory for a poster presented at a conference to appear in the proceedings if the author does not wish it.
3. Proceedings do not normally include discussions of posters.
4. Papers that are presented as posters and intended for publication in full in the proceedings are published in the same way as orally presented papers. The only distinction is that the serial number ends with P (IAEA-SM-140/16P).
5. For posters that are to be published as summaries, the extended synopsis should normally be accepted for publication (see also Chapter VII).
6. It must be decided as soon as possible after the conference, in consultation with the Scientific Secretary, where in the proceedings the posters should appear: interspersed among the oral presentations of the relevant sessions, at the ends of the sessions or collected together in a separate section (or sections).
7. If posters appear in a separate section, a separator page is required, bearing the title POSTER SESSION or POSTER PRESENTATIONS in 12 point medium capitals.
8. If summary posters appear at the ends of the appropriate sessions, the first of each group starts on a new right hand page and is preceded by the heading POSTER PRESENTATIONS in 12 point bold capitals at the margin (see below). The rest of the posters are run on.

**POSTER PRESENTATIONS**

12°C bold

IAEA-CN-40/16P

8°C bold

**TRACER TECHNIQUES FOR  
ANALYSING HYDRAULIC CONDITIONS IN  
A SEDIMENTATION BASIN PERFORMANCE STUDY**

10°C bold

R. KUOPPAMÄKI, V.J. KÄMÄRÄINEN, S. LEHTOLA  
Reactor Laboratory,  
Technical Research Centre of Finland,  
Espoo, Finland

10°C  
10°

9. A listing of summary posters in the contents list is shown in example 1 of Chapter IV.



# HEADINGS AND SUBHEADINGS

## A. PART AND CHAPTER HEADINGS

1. The largest divisions of some publications are called parts; these usually begin with separator pages. A part (identified by a capital Roman numeral) could be made up of either chapters (see example 1 below) or sections (example 2).
2. If a title appears on a separator page, it should not be repeated at the top of the following right hand page of text.
3. A chapter (identified by an Arabic numeral) should begin on a new right hand page, with 'Chapter 1' on one line and the title in capitals on another. This division is normally appropriate only for the longest of Technical Reports.

## B. SECTION HEADINGS

4. Section headings (identified by Arabic numerals) follow part or chapter headings in the usual style: number and title on the same line, without the word 'Section'.
5. If there is no chapter heading and the part heading (if any) is on a separator page, the section heading should be typed in 12 point bold capitals and centred (see examples 2 and 5). Otherwise the section heading (e.g. '5.2. EXPERIMENTS') is placed at the margin and is typed in 10 point capitals.
6. Sections do not have to begin on new pages, but may be run on throughout the publication.

*Example 1*

*Technical Report divided into parts and chapters*

(a) Separator page:

12°

Part I

12°C

GENERAL INTRODUCTION  
TO EXPERIMENTAL WORK

(b) Each chapter starts on a new right hand page:

12° bold

**Chapter 3**

12°C bold

**QUALITY ASSURANCE AND CONTROL  
IN NUCLEAR FUEL TECHNOLOGY**

3.1. PROPERTIES OF RADIONUCLIDES AND RADIATIONS

10°C

**3.1.1. Interaction of radiation with matter**

10° bold

*3.1.1.1. Alpha particles*

10° italic

(c) Running heads (8 point bold capitals, centred) are as follows:

Left hand page: **PART I. GENERAL INTRODUCTION**

Right hand page: **CHAPTER 3. QA/QC IN NUCLEAR FUEL TECHNOLOGY**



## HEADINGS AND SUBHEADINGS

### *Example 2*

*Technical Report divided into parts  
consisting of sections*

(a) Separator page:

12°

Part III

12°C

DESCRIPTIONS AND EXAMPLES  
OF TYPICAL QA/QC SYSTEMS

(b) Only the first section of each part necessarily starts on a right hand page (the rest are run on):

12°C bold

### **14. QUALITY ASSURANCE AND CONTROL IN NUCLEAR FUEL TECHNOLOGY**

14.1. INTRODUCTION

10°C

**14.1.1. UO<sub>2</sub> fuel**

10° bold

*14.1.1.1. Enrichment*

10° italic

(c) Running heads (8 point bold capitals, centred) are as follows:

Left hand page: **PART III. DESCRIPTIONS AND EXAMPLES**

Right hand page: **14. QA/QC IN NUCLEAR FUEL TECHNOLOGY**

*Example 3*

*Technical Report divided into parts  
but without separator pages or chapters*

- (a) Each part starts on a new right hand page and the sections are run on:

12° bold

**Part II**

12°C bold

**GENERAL ASPECTS AND GUIDELINES FOR  
QUALITY IN NUCLEAR FUEL TECHNOLOGY**

II.1. QUALITY CONTROL IN RELATION TO QUALITY ASSURANCE IN NUCLEAR FUEL TECHNOLOGY 10°C

**II.1.1. Quality assurance philosophy and definitions** 10° bold

*II.1.1.1. QA/QC aspects of State authorities* 10° italic

- (b) Running heads (8 point bold capitals, centred) are as follows:

Left hand page: **PART II**

Right hand page: **GENERAL ASPECTS AND GUIDELINES**

*Example 4*

*Technical Report with chapters as main divisions*

- (a) Each chapter starts on a new right hand page:

12° bold

**Chapter 2**

12°C bold

**CRITICALITY ACCIDENTS AND  
THEIR RADIATION FIELDS**

2.1. DEFINITION OF A CRITICALITY ACCIDENT 10°C

**2.1.1. Neutron spectra from critical assemblies** 10° bold

*2.1.1.1. Heavy element systems* 10° italic

- (b) Running heads (8 point bold capitals, centred) are as follows:

Left hand page: **CHAPTER 2**

Right hand page: **CRITICALITY ACCIDENTS**

*Example 5*

*Technical Report with sections as main divisions*

(a) Only Section 1 necessarily starts on a right hand page (the rest are run on):

12°C bold

**1. SOURCES OF AIRBORNE RADIONUCLIDES  
AND GAS CLEANING SYSTEMS**

1.1. SOURCES OF AIRBORNE RADIONUCLIDES

10°C

**1.1.1. Particulate filter systems**

10° bold

*1.1.1.1. Laboratory test methods*

10° italic

(b) No running heads.

**C. SUBSECTION HEADINGS**

7. The order and forms of decimalized subsection headings are shown in the previous examples.

8. To avoid having too many digits in decimalized subheadings, use should be made of (a), (b), (c),..., (i), (ii), (iii),..., dashes/bullets and unnumbered subheadings (see para. 4 of Chapter 7, Headings, Subheadings and Enumeration).

9. Indenting and line spacing rules are strictly observed by the Production Unit and should be changed only when there is a compelling reason; such changes should be indicated clearly (see Chapter 7).

**D. CENTRED HEADINGS**

10. In addition to the part, chapter and section headings illustrated above, the following 12 point headings are centred:

12°C

PROCEEDINGS SERIES

12°C

TECHNICAL REPORTS SERIES No. 234

12°C bold

**FOREWORD**

12°C bold

**CONTENTS**

12°C

DISPOSAL IN DEEP GEOLOGICAL FORMATIONS

12°

(Session IV)

12°C bold

**PANEL 2**

**TRAINING IN NUCLEAR MEDICINE**

12°C bold

**CHAIRPERSONS OF SESSIONS**

12°C bold

**SECRETARIAT OF THE SYMPOSIUM**

12°C bold

**GLOSSARY**

12°C bold

**LIST OF PARTICIPANTS**

12°C bold

**CONTRIBUTORS TO DRAFTING AND REVIEW**

12°C bold

**AUTHOR INDEX**

12°C bold

**INDEX OF PAPERS AND POSTERS BY NUMBER**

11. The following bold, centred headings are in 12 point unless they are (a) part of a paper in a set of proceedings or (b) part of a chapter or section of a report (then use 10 point bold):

**ACKNOWLEDGEMENTS**

**REFERENCES**

**BIBLIOGRAPHY**

**DISCUSSION**

12. The headings of appendices and annexes are in 10 point bold unless they are to appear on separator pages (then use 12 point medium):

10° bold

**Appendix**

10°C bold

**SAMPLING PROCEDURE**

10° bold

**Annex III**

10°C bold

**GAMMA RAY LOG EVALUATION**

Note that the word Appendix or Annex is in lower case.

## APPENDICES AND ANNEXES

1. An appendix is an integral part of a paper or document whereas an annex is additional background information. When the difference is not obvious, the Scientific Secretary should be consulted.
2. The text of an appendix or annex may be typed in 9 rather than 10 point if this would be in keeping with its relative importance and the appearance of the rest of the publication.
3. Headings are in 10 point bold unless they are to appear on separator pages (then use 12 point medium):

10° bold

**Appendix**

10°C bold

**SAMPLING PROCEDURE**

10° bold

**Annex III**

10°C bold

**GAMMA RAY LOG EVALUATION**

4. If there is only one appendix (annex) in a manuscript, it is called the Appendix (Annex), not Appendix I or Appendix A (see Section III of Chapter 7, Headings, Subheadings and Enumeration).
5. Enumeration of tables, figures, equations and references in appendices and annexes is described in Section III of Chapter 7.
6. The first appendix or annex should always begin on a new right hand page, with subsequent appendices/annexes each starting on the next new page. Appendices and annexes are normally placed before and after the references, respectively.



## CHAIRPERSONS OF SESSIONS

1. In proceedings the names of session chairpersons are listed, together with the Secretariat staff, at the end of the book, immediately preceding the list of participants (but see para. 4 below). The designating Member State or organization should appear with each name:

12°C bold

### CHAIRPERSONS OF SESSIONS

10°	10°C	10°
Session 1	A. BRYNJOLFSSON E. MAESTAS	United States of America OECD Nuclear Energy Agency
Session 2	R. HÖFER	Austria

2. The chairperson's name in the list must be in the same form as on the separator page and, if the chairperson is also the author of a paper, it should be in the same form in all three places. If the chairperson is titled (e.g. Sir, Dame), the title should be given in full. The editor should ensure that the name in the list of participants is identical.

3. It is advisable to check the designating Member State or organization; for example, for a chairperson from the European Commission whose name does not appear in the conference programme, Belgium might have been written by mistake.

4. In multivolume proceedings, each volume will contain only the chairpersons of the sessions reported in that volume, except that the volume containing the list of participants, author index, etc. (whether this is a separate volume or not), will contain a complete list of chairpersons of all sessions.





# SECRETARIAT

1. In proceedings the Secretariat list, in 10 point, appears after the list of chairpersons and immediately before the list of participants. If space permits, the Secretariat list and the list of chairpersons should appear on the same page. In multivolume proceedings, the Secretariat list appears at the end of each volume.

(a) Simple list involving the Agency only:

12°C bold

## SECRETARIAT OF THE SYMPOSIUM

S. NOVAK	Scientific Secretary
M. PODEST	Scientific Co-Secretary
A. SOKOL	Conference Services
M. DAVIES	Records Officer
M. SPAK	Proceedings Editor

(b) List involving a Member State and another organization:

12°C bold

## SECRETARIAT OF THE CONFERENCE

M. TAUCHID	Scientific Secretary (IAEA)
J. FARKAS	Scientific Secretary (UNSCEAR)
G. HERRMANN	Liaison Officer (Germany)
G. SEILER	Conference Services (IAEA)
M. LEWIS	Proceedings Editor (IAEA)



# LIST OF PARTICIPANTS, AND LIST OF CONTRIBUTORS TO DRAFTING AND REVIEW

## A. PROCEEDINGS

1. A final list of participants, prepared by the Conference Services Section after the meeting, is given to the editor with the registration forms completed by the participants. The names in this list are grouped alphabetically under designating Member States and international organizations. A second version is provided with all participants in alphabetical order in one continuous list, the name of the country having been added to each postal address. The standard form of participants list in the publication is a single sequence of participants in alphabetical order. If, exceptionally, it is considered necessary to list the participants under the names of their designating Member States and international organizations, the style set out in example 3 should be followed.

2. The main heading is set in 12 point bold capitals and centred:

12°C bold

### LIST OF PARTICIPANTS

#### **Names**

3. Participants' names appear in alphabetical order and are typed in 9 point initial capitals. Surnames are followed by initials of given names (with the exception of Chinese and certain other given names; see para. 23 of Chapter 17, Names and Titles). Designations (e.g. Jr.) are written last:

von Wald, M., Jr.

Nuklearmedizinische Abteilung, Klinikum Steglitz,  
Freie Universität Berlin,  
Hindenburgdamm 30, 12200 Berlin, Germany  
Fax: +493081082643

The address column is on a 5 cm (12 pica) indent. For notes on alphabetical order see Chapter 13, Alphabetical Lists and Indexes.

4. When a participant has a title (e.g. Sir, Dame), the name should be given as usual but with the title and full name added below in parentheses (academic titles are not given):

Lucas, W.  
(Sir William Lucas)

Centralised Waste Management Facility,  
Bhabha Atomic Research Centre,  
Kalpakkam-603 102, Tamil Nadu, India  
Email: lucas@barc.ernet.in

5. Surnames beginning with separate particles, such as De, di, 't, van and von, regardless of whether they begin with a capital or a lower case letter, should be listed alphabetically according to the particle.

### **Addresses**

6. The elements of the address should be written in the following order with commas separating the elements but with no punctuation after the name of the country, after the fax number or at the end of the entry:

- (a) Section or department of institute;
- (b) Institute (name as given, whether in English or not; if the participant supplies an abbreviation, it is at the discretion of the editor to decide the abbreviation should be included as well as the name written out in full);
- (c) Parent organization, if any (international organizations are to be written in their English form);
- (d) Street and number;
- (e) P.O. box number if given (if street number and P.O. box number are both given, they should both appear, with the street number first);
- (f) Postal code for the country (according to the current Universal Postal Union web site, country prefixes, such as A- and D- in Austrian and German postal addresses, respectively, are no longer used; the postal code element may also appear after (g), (h) or (i) — see Section D);
- (g) Town, with the accepted English spelling;
- (h) Regional designation (e.g. county in the United Kingdom and state in India), where given as part of the address, written in full (except that where official abbreviations exist for use in conjunction with postal codes, such as those for Brazilian and US states, Canadian and Mexican provinces, and Australian states and territories, they may be used — see Sections C and D);
- (i) Country, in Agency style, in English (the designation United Kingdom should be substituted for England, Northern Ireland, Scotland and Wales);
- (j) Fax number and email address, if supplied by the participant.

Any of items (a), (b) and (c) may be typed on the same line if the line would then end with the end of (b) or (c), but none should be combined in this way with other elements of the address. If (a), (b) or (c) is too long for one line, the second line should be indented by 1 pica. It is desirable to run on items (d–i) as much as possible, but without splitting any element at the end of a line, to make full use of the page width. Each element in item (j) should appear on a new line.

de Liverant, P.

Institut de radioprotection et de sûreté nucléaire,  
B.P. 17, 92262 Fontenay-aux-Roses, France  
Fax: +3314253100  
Email: liverant@irsn.fr

Galuppi, T.

National Radiological Protection Board,  
Chilton, Didcot, Oxfordshire OX11 0RQ,  
United Kingdom  
Fax: +442076331104  
Email: galuppi@nrpb.org

## LIST OF PARTICIPANTS

Stein, F.N., III

Medical Department,  
Brookhaven National Laboratory,  
Upton, NY 11973, United States of America  
Fax: +16312446577  
Email: fnstein@bnl.gov

7. If a participant is also the author of a paper, the section, institute and organization in the address should be identical with those in the affiliation. It is permissible, however, for these names to be in English in the title block and in the language of the country in the list of participants. Names of international organizations should always be given in their English form. Sometimes affiliation and postal address may be completely different (for instance, if the participant has changed institutes), in which case a footnote to the title block should make this evident.

8. The Scientific Secretary is included in the list of participants in panel proceedings but not in conference proceedings since the latter include a Secretariat list. Observers at conferences are not normally included in the list of participants.

9. If a participant in a verbatim discussion is an observer and not an official participant, his or her remarks should not be included in the published discussion unless the Scientific Secretary specifically asks that they be included.

10. In multivolume proceedings the list of participants appears only at the end of the final volume. For large conferences with proceedings of five or more volumes it may be advisable to publish a final volume solely devoted to lists and indexes.

11. The standard style for listing participants in a proceedings volume is shown in example 1 below. Example 3 shows an exceptional case where the participants are listed according to designating Member State or international organization. In this case, Member States are listed first, followed by international organizations in English. Care must be taken to include the name of the country in the postal address when it is different from that of the designating Member State. In contrast to the case of affiliations given in the List of Contributors to Drafting and Review (example 2), the name of the country is always included in the postal address of international organizations.

## **B. TECHNICAL REPORTS, IAEA SAFETY STANDARDS SERIES, ETC.**

12. For publications other than proceedings, the main heading is:

12°C bold

### **CONTRIBUTORS TO DRAFTING AND REVIEW**

Individuals are listed alphabetically before summary details of the meetings which they attended (all in 9 point). Only the names of the organization and the country are given for each contributor (in the case of an international organization, no country is given). If the list supplied by the originator contains an abbreviation, it is at the discretion of the editor to decide whether the abbreviation should be included as well as the name of the organization written out in full.

13. Example 2 shows the same individuals as in example 1 as they would be listed in a Technical Report.

## CHAPTER XIII

### *Example 1*

### *Proceedings*

## LIST OF PARTICIPANTS

- Baronov, Yu.I. MosNPO Radon,  
7 Rostovskij Pereulok 2/14,  
119121 Moscow, Russian Federation  
Fax: +70952481941
- Gardenner, C. Department for Environment, Food and  
Rural Affairs,  
Nobel House, 17 Smith Square,  
London SW1P 3JR, United Kingdom  
Fax: +442087451354  
Email: C.Gardenner@defra.gov.uk
- Kinbote, C. United Nations Industrial Development  
Organization,  
Wagramer Strasse 5, P.O. Box 300,  
1400 Vienna, Austria  
Fax: +4312692669  
Email: C.Kinbote@unido.org
- Nacin, E. Radioactive Waste Repository Authority,  
Dlazdena 6,  
110 00 Prague 1, Czech Republic  
Email: nacine@rawra.cz
- Nielsen, N. Division of Nuclear Power,  
International Atomic Energy Agency,  
Wagramer Strasse 5, P.O. Box 100,  
1400 Vienna, Austria  
Fax: +43126007  
Email: N.Nielsen@iaea.org
- Plecas, B.I. Ministry of Science, Technology and  
Development of the Republic of Serbia,  
Nemanjina 22–24,  
11000 Belgrade, Serbia and Montenegro  
Email: biplecas@mnt.bg.ac.yu
- Repin, O. European Commission,  
Rue de la Loi 200,  
1049 Brussels, Belgium  
Fax: +3222950061  
Email: orepin@cec.eu.int
- Zhao, Weidong Canadian Nuclear Safety Commission,  
280 Slaton Street, P.O. Box 1046, Station B,  
Ottawa ON K1P 5S9, Canada  
Fax: +16139969644  
Email: Zhaow@cnsccsn.gc.ca

## LIST OF PARTICIPANTS

### *Example 2*

### *Technical Report*

## CONTRIBUTORS TO DRAFTING AND REVIEW

Baronov, Yu.I.	MosNPO Radon, Russian Federation
Gardener, C.	Department for Environment, Food and Rural Affairs, United Kingdom
Kinbote, C.	United Nations Industrial Development Organization
Nacin, E.	Radioactive Waste Repository Authority, Czech Republic
Nielsen, N.	International Atomic Energy Agency
Plecas, B.I.	Ministry of Science, Technology and Development of the Republic of Serbia, Serbia and Montenegro
Repin, O.	European Commission
Zhao, Weidong	Canadian Nuclear Safety Commission, Canada

### **Technical Committee Meetings**

Vienna, Austria: 28 October–1 November 2002, 22–26 April 2003  
Albuquerque, New Mexico, United States of America: 10–14 February 2003

### **Consultants Meetings**

Vienna, Austria: 2–7 December 2002, 30 June–3 July 2003,  
12–16 January 2004, 16–19 February 2004  
Otaniemi, Finland: 5–8 May 2003

### **Advisory Group Meeting**

Vienna, Austria: 29 September–3 October 2003

## CHAPTER XIII

### *Example 3*

*Proceedings where, exceptionally, it has been decided that participants are to be listed under the name of their designating Member State or international organization*

### LIST OF PARTICIPANTS

#### ARMENIA

Harutyunyan, L. Armenian Nuclear Regulatory Authority,  
4 Tigran Mets Street,  
375010 Yerevan  
Fax: +3741537978

#### AUSTRALIA

Teoh, C.K. HIFAR Engineering Section,  
Australian Nuclear Science and  
Technology Organisation,  
New Illawarra Road,  
Lucas Heights, NSW 2234  
Fax: +61295431234  
Email: [ckt@ansto.gov.au](mailto:ckt@ansto.gov.au)

#### BELGIUM

Dresselaers, R. Belgoprocess NV,  
Gravenstraat 73,  
2480 Dessel  
Fax: +3214337048  
Email: [dresselaers@belgoprocess.be](mailto:dresselaers@belgoprocess.be)

Janssens de Bistoven, J.-C. Permanent Mission of Belgium to the  
International Atomic Energy Agency,  
Wohllebengasse 6,  
1040 Vienna, Austria  
Fax: +4315020711

#### EUROPEAN COMMISSION

Daures, P. Institute for Transuranium Elements (JRC-ITE),  
European Commission,  
P.O. Box 2340, 76125 Karlsruhe, Germany  
Fax: +49724795999389

De Esteban, F. Directorate General for Energy and Transport,  
European Commission,  
24 Rue de Mot,  
1040 Brussels, Belgium  
Fax: +3222950061



**LIST OF PARTICIPANTS**

**INTERNATIONAL COMMISSION ON RADIOLOGICAL PROTECTION  
(ICRP)**

Kraft, D.

International Commission on Radiological  
Protection,  
c/o National Radiological Protection Board,  
Chilton, Didcot, Oxfordshire OX 11 0RQ,  
United Kingdom  
Fax: +441235833679  
Email: [Derek.Kraft@nrpb.org](mailto:Derek.Kraft@nrpb.org)

### C. POSTAL CODE PREFIXES FOR THE USA

14. The following prefixes to postal codes are used for US addresses in lists of participants (and after names of cities in bibliographical references).

Alabama	AL	Montana	MT
Alaska	AK	Nebraska	NB
Arizona	AZ	Nevada	NV
Arkansas	AR	New Hampshire	NH
California	CA	New Jersey	NJ
Colorado	CO	New Mexico	NM
Connecticut	CT	New York	NY
Delaware	DE	North Carolina	NC
District of Columbia	DC	North Dakota	ND
Florida	FL	Ohio	OH
Georgia	GA	Oklahoma	OK
Guam	GU	Oregon	OR
Hawaii	HI	Pennsylvania	PA
Idaho	ID	Puerto Rico	PR
Illinois	IL	Rhode Island	RI
Indiana	IN	South Carolina	SC
Iowa	IA	South Dakota	SD
Kansas	KS	Tennessee	TN
Kentucky	KY	Texas	TX
Louisiana	LA	Utah	UT
Maine	ME	Vermont	VT
Maryland	MD	Virgin Islands	VI
Massachusetts	MA	Virginia	VA
Michigan	MI	Washington	WA
Minnesota	MN	West Virginia	WV
Mississippi	MS	Wisconsin	WI
Missouri	MO	Wyoming	WY

**Note:** In affiliations in the title block for papers in proceedings, the names of states are written in full except for D.C. and for N.Y. after the city New York.

**D. POSTAL CODE NUMBERS IN ADDRESSES**

15. The following list shows the form of postal addresses when they include a postal code number. According to the current Universal Postal Union web site, country prefixes (e.g. A- and D- for Austria and Germany, respectively) are not used. More information on postal addressing systems can be found on the web site of the Universal Postal Union, <http://www.upu.int/>

Argentina  
C1000ZAA Buenos Aires

Hungary  
Budapest 1540

Armenia  
375010 Yerevan

India  
Madras-600027

Australia  
Fortitude Valley QLD 4006

Iran, Islamic Republic of  
16314 Tehran

Austria  
9020 Klagenfurt

Israel  
70600 Yavne

Belgium  
4800 Verviers

Italy  
21020 Ispra

Brazil  
Brasilia-DF, 70002-900

Japan  
Nigata 951-8073

Bulgaria  
1505 Sofia

Korea, Republic of  
Seoul 110-110

Canada  
Vancouver BC V6T 2A3

Luxembourg  
4750 Pétange

China  
100804 Beijing

Malaysia  
50480 Kuala Lumpur

Czech Republic  
110 00 Prague 1

Mexico  
(a) 06082 Mexico, DF  
(b) 77520 Cancun, Q ROO

Denmark  
8800 Viborg

Netherlands  
1231 AB Postam

Finland  
27160 Olkiluoto

Norway  
0025 Oslo

France  
30205 Bagnols-sur-Cèze

Philippines  
2000 Pampanga

Germany  
81925 Munich

Poland  
81-116 Gdynia

Greece  
101 88 Athens

Portugal  
1250-096 Lisbon

CHAPTER XIII

Romania  
060274 Bucharest

Russian Federation  
119121 Moscow

Saudi Arabia  
Riyadh 11564

Serbia and Montenegro  
11070 Belgrade

Singapore  
Singapore 546080

South Africa  
Johannesburg 2001

Spain  
10430 Caceres

Sweden  
582 20 Linköping

Switzerland  
5303 Würenlingen

Turkey  
06101 Ankara

United Kingdom  
Warrington, Cheshire WA3 6AS

United States of America  
(a) Denver, CO 80201  
(b) Troy, NY 12180-3590

## GLOSSARIES

1. It is the responsibility of the Scientific Secretary to ensure that the definitions or explanations are correct. The editor should nevertheless check entries against those that have already appeared in reports in the same series or against separate glossaries for various fields (e.g. safeguards, waste management, radiation safety).

2. Each term is set in 10 point bold and starts with a lower case initial unless the word normally takes a capital. Entries are separated by a line space. The layout is as follows:

12°C bold

### GLOSSARY

**acceptable limit.** Limit acceptable to the regulatory body.

**aquifer.** (a) A water bearing formation below the surface of the Earth that can furnish an appreciable supply of water for a well or spring.

(b) Geological formation or porous soil through which water may percolate for long distances, yielding groundwater to springs and wells.

**biosphere.** That portion of the Earth's environment inhabited by any living organisms. It comprises parts of the atmosphere, the hydrosphere (oceans, seas, inland waters and subterranean waters) and the lithosphere. The biosphere includes the human habitat or environment in the widest sense of these terms. (See human environment.)

**confinement (or isolation) of wastes.** The segregation of radionuclides from the human environment and the restriction of their release into that environment in unacceptable quantities or concentrations.

3. Where a list of 'definitions' is given rather than a glossary, it may be appropriate to add a qualifying sentence:

12°C bold

### DEFINITIONS

*The definitions given below may not necessarily conform to definitions adopted elsewhere for international use.*

**certification.** The act of verifying and attesting in writing to the qualifications of personnel, processes, procedures or items in accordance with specified requirements.

4. A glossary follows the list of references (unless it has been included as an appendix: see Chapter X, para. 6) and any annexes but precedes the list of contributors to drafting and review. A glossary always begins on a new right hand page.



## **AUTHOR INDEX**

1. Conference and symposium proceedings and, if long enough, panel proceedings require an author index.
2. The author index is compiled from the contents list and is set in 10 point. The final layout is as a two column page. The main heading is as follows:

12°C bold

### **AUTHOR INDEX**

3. The form and punctuation for a single volume publication are as follows:

Graham, C.W.: 295, 339

Karasuddhi, P.: 141

For a multivolume publication the volume number is set in Arabic numerals in parentheses:

Nishimura, H.: (1) 25, 503; (2) 81;  
(5) 603

Phillips, J.: (2) 259; (3) 471;  
(4) 380

4. The editor should ensure that the index is consistent with respect to individual authors' names. In cases where some individuals are authors of several papers, the authors may have written their names differently in different papers (e.g. Brown, P., and Brown, P.G.). The editor should also check that the names of authors at the meeting are spelled the same in the list of participants.
5. If, exceptionally, it is considered necessary to give the names of participants in verbatim discussions, these are put into a separate list:

12°C bold

### **INDEX OF PARTICIPANTS IN DISCUSSIONS**

This list should also be compiled at an early stage of editing to ensure correct, consistent spellings. The list follows the author index and need not begin on a new page.





## COVER DESIGN

1. For proceedings and non-series publications the Scientific Secretary should be reminded at an early stage to suggest a suitable illustration for the cover. The final design (which should have no commercial implications) is usually decided upon by the editor in conjunction with the Scientific Secretary and the Senior Graphic Artist.
2. For proceedings jointly produced with other international organizations, the emblems of all the organizations involved should appear on the cover in alphabetical order according to the full name of the organization. The emblems should all be the same size.
3. Editors should make use of the Cover Design Sheet and ensure that the necessary clearances are obtained.
4. Both Scientific Secretary and editor sign their approval of the final cover.
5. The editor should draft a caption (set in 10 point sanserif type (Univers)) for the inside front cover if this is required for the cover illustration (see para. 2 of Chapter I, Front Matter).
6. Every book should have on its back cover, along with a paragraph briefly describing the content of the book, the following source information:

INTERNATIONAL ATOMIC ENERGY AGENCY

VIENNA

ISBN NN-N-NNNNNN-N

ISSN NNNN-NNNN



## **CORRIGENDA**

1. If a corrigendum is required, it should follow the form shown in example 1.
2. Should an additional corrigendum to the same book later be required, it should repeat the earlier corrigendum and should include the instruction to the reader that it is a replacement of the earlier corrigendum (example 2).
3. Every corrigendum should show the date as a footer.

*Example 1*

ABSORBED DOSE DETERMINATION IN  
EXTERNAL BEAM RADIOTHERAPY:  
AN INTERNATIONAL CODE OF PRACTICE FOR DOSIMETRY  
BASED ON STANDARDS OF ABSORBED DOSE TO WATER

Technical Reports Series No. 398  
(STI/DOC/010/398)

**CORRIGENDUM**

1. Table 18 on page 91 should be replaced by the revised table overleaf. New values — in **bold type** — are given for the:
  - Roos chamber, which previously had not used the  $p_{\text{wall}}$  ( $^{60}\text{Co}$ ) from Table 37 in Appendix II;
  - NE 2581 chamber, which previously had assumed an Al central electrode.
2. Page 103. The chapter heading and paras 1 and 2 of this chapter should be omitted.

## CORRIGENDA

### *Example 2*

ABSORBED DOSE DETERMINATION IN  
EXTERNAL BEAM RADIOTHERAPY:  
AN INTERNATIONAL CODE OF PRACTICE FOR DOSIMETRY  
BASED ON STANDARDS OF ABSORBED DOSE TO WATER

Technical Reports Series No. 398

(STI/DOC/010/398)

## CORRIGENDUM

*This corrigendum replaces that issued on 2003-02-06.*

1. Table 18 on page 91 should be replaced by the revised table overleaf. New values — in **bold type** — are given for the:
  - Roos chamber, which previously had not used the  $p_{\text{wall}}$  ( $^{60}\text{Co}$ ) from Table 37 in Appendix II;
  - NE 2581 chamber, which previously had assumed an Al central electrode.
2. Page 103. The chapter heading and paras 1 and 2 of this chapter should be omitted.
3. Page 117, Table 34. In the column “Quantity in SQs”, the number “6785” should read “6875”.



**Appendix to  
Editors' Supplement**

**TYPE SIZES**

---

**Front matter**

<i>Half-title page</i>	12°C
<i>Member States page</i>	
Member States	7°C
'The Agency's Statute', etc.	8°
<i>Title page</i>	
'IAEA SAFETY STANDARDS SERIES'/ 'PROCEEDINGS SERIES'	12°C
Title	20°C
'SAFETY REQUIREMENTS', 'REPORT TO THE IAEA', etc.	12°C
'In four volumes'	10° italic
'Edition'; 'Volume', subtitle	16°; 16°C
Description (e.g. of meeting)	10°C
IAEA, Vienna, year	10°C
<i>Publication data page</i>	
Copyright notice	10°
'© IAEA, 2005', 'Printed by', etc.	8°
CIP	8°
<i>Editorial note</i>	
Heading	10°C italic
Text	9° italic

---

**Text**

Main text	10°
Abstract	9°
Appendix, Annex	10° or 9° <sup>a</sup>
References, Bibliography	9°
Glossary	10°
List of participants	9°
Author index	10°
Papers and posters index	9°
Running heads	8°C bold
Footnotes	9°
Sub/superscripts	7°
Figure captions	9° italic

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**TYPE SIZES (cont.)****Headings**


---

'Abstract'	10° bold
Centred headings	12°C bold or 10°C bold <sup>b</sup>
Section, subsection headings	10°C, 10° bold, 10° italic, 10°
<i>Separator pages</i>	
Session title; number	12°C; 12°
'Chairperson'; name; country	10° bold; 10°C bold; 10°

---

**Title block**

'Invited Paper'	12° bold
'POSTER PRESENTATIONS'	12°C bold
Paper title	12°C bold
Summary poster title	10°C bold
Author's name	10°C
Affiliation	10°
'Presented by'	10° italic

---

**Tables**

Table headings	10°C
Column headings, tabular matter	9°
Notes, footnotes	9°
Footnote symbols	7°

---

Type size	7	8	9	10	11	12	14	16	20	24
Line spacing	9	10	12	13	14	14	16	18	24	24

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<sup>a</sup> See Chapter X, para. 2.<sup>b</sup> See Chapter IX, paras 10–12.



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  - Information Booklet 11.[56]
  - International Nuclear Fuel Cycle Evaluation 11.[43]
  - paper in same proceedings 11A.[66]
  - proceedings 11.[16, 35]
  - Safeguards Information Series Publication 11.[57]
  - Safety Series publication 11.[20]
  - Technical Document 11.[19, 38]
  - Technical Report 11.[57]
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