



EU Harmonisation – MDR Requirements & progress on Key Standards & Labelling

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Topics for this afternoon

- EU Harmonisation & Impact of MDR/IVDR on existing standards
- Progress on some key standards
 - 13485 Quality Management Systems
 - 14971 Risk Management
 - 15223 Symbols & Labelling
 - and some others
- Specifically symbols & labelling
 - MDR requirements
 - Status update
- Questions via the “chat”



What we know



- MDR superseded MDD+AIMDD in May 2017 (transition 3 years)
 - IVDR superseded IVDD in May 2017 (transition 5 years)
 - MDR and IVDR differ from the Directives (technically and legally)
 - ~300 Harmonized standards under the Directives
- ➔ Ultimately: will no longer provide presumption of conformity under the Regulations

What needs to be done



Current standards to be adapted

(Annex Z only and/or Annex Z + technical content)

New standards to be developed

Harmonized standards shall be produced under specific
standardization request

New Approach



Presumption of conformity



European Standard (EN)

EC-CEN-CENELEC Action Plan on non-cited harmonised standards



- Structural solutions to decrease the stock of non-cited harmonised standards
- Pilot projects to be organised
- Important to be forward looking – discuss standards not only in relation to the Directives but also the new Regulation
- Subsequently share identified best practices among Technical Committees on Annexes ZA/ZZ

Current status of transition



(Tentative): Priority list was presented to the EC

- Medical devices: ~140 standards
- IVDs: 39 standards
- New areas for standardization: 7

This list will be presented in the standardization WG underneath the MDCG to start the discussions on the standardization request.

Next steps for transition

- 1) Harmonized standards where an in-depth content review will be required;
- 2) Harmonized standards that need no or little modification (e.g. revision of Annex Z); and
- 3) New harmonized standards to be developed.
- 4) Develop a timeline for the revision and drafting of new standards vis-à-vis the transition period of the Regulations.
- 5) Confirmation of adjusted MDR/IVDR Annex ZZ/ZA template to start preparations.

Key consideration 1: Technical changes to European ISO / IEC standards

Key consideration 2: Guidance on Annexes ZA / ZZ

Considerations from EC

CCMC seminar on MDR/IVDR transition – Brussels – 21st September 2017 – EC

- TCs should ensure that the guidelines/check list for the Annexes ZZ/ZA are complied with to avoid future delays in the OJ publication.
- Considering EU case law, it's important that the EC has a strong role in ensuring the standards are fulfilling the relevant requirements.
- The notified bodies are expected to pursue stricter oversight.
- Ambiguity should be avoided with regards to the repeal dates of revised standards.
- The role of the New Approach Consultant needs to be altered to support the EC in a different manner and the consultants will be involved earlier in the development.
- The timing of published standards should be coordinated to avoid future delays.
- Standards are voluntary practical tools which will serve a different purpose as CS.

Harmonised Standards

- ***"important role"*** of standardisation in the field of medical devices" (recital 22 MDR / 20 IVDR)
- **voluntary tool** to demonstrate conformity (Article 8(1) MDR/IVDR)
 - devices: with the general **safety and performance requirements** (Annex I)
 - economic operators and sponsors: **system or process requirements**, including those relating to quality management systems, risk management, post-market surveillance systems, clinical investigations, clinical evaluation or post-market clinical follow-up ('PMCF')
- express "link" to the Standardisation **Regulation (EU) No 1025/2012**: EU standard adopted on Commission request for the application of EU legislation (Article 2(70) MDR)
- publication of references in the **OJ EU**

REG.1025/2012/EC(preamble (6)) Standardisation plays an increasingly important role in international trade and the opening-up of markets. The Union should seek to promote cooperation between European standardisation organisations and international standardisation bodies.

References to use of Harmonised Standards in MDR/IVDR

The EC recognizes the importance of harmonized standards.

In multiple places in the MDR and the IVDR, reference is made to harmonised standards. Examples from MDR:

- Article 10.9: General obligation of manufacturer: take into account changes in harmonised standards
- Article 32.2: Summary of safety and performance shall include references to harmonised standards
- Annex I, 23.1h: use of symbols in the instructions for use / packaging supplied by manufacturer to conform to harmonised standards
- Annex II.4: Technical documentation to contain references to harmonised standards and precise identity of controlled documents that prove conformity with them
- Reprocessing of single-use devices - HS as a "benchmark" in the absence of common specifications

Example of specific harmonised standard

- (64) The rules on clinical investigations should be in line with well-established international guidance in this field, such as the international standard ISO 14155:2011 on good clinical practice for clinical investigations of medical devices for human subjects, so as to make it easier for the results of clinical investigations conducted in the Union to be accepted as documentation outside the Union and to make it easier for the results of clinical investigations conducted outside the Union in accordance with international guidelines to be accepted within the Union. In addition, the rules should be in line with the most recent version of the World Medical Association Declaration of Helsinki on Ethical Principles for Medical Research Involving Human Subjects.

**Specific harmonised standard
identified in recital 64 in MDR and
recital 66 in IVDR**

Other provisions referring to harmonised standards

- **labelling** - use of symbols in the instructions for use / packaging – Annex I Point 23.1(h) MDR
- **notified bodies** – requirements regarding NB personnel – Annex VII
- **Annex XVI products** – HS as a "benchmark" for developing common specifications
- **reprocessing of single-use devices** - HS as a "benchmark" in the absence of common specifications

Common Specifications

- a "support" regulatory tool (Article 2(71)), where (Article 9(1) MDR/IVDR):
 - no harmonised standards exist; or
 - they are insufficient; or
 - there is a need to address public health concerns
- means of complying with the general safety and performance requirements
- mandatory, unless a manufacturer can justify that the adopted solutions ensure an equivalent level of safety and performance (Article 9(3))
- *"should be developed after consulting the relevant stakeholders and taking account of European and international standards"* (recital 24 MDR / 22 IVDR)
- Commission's implementing act, after consultation of MDCG

Annex XVI & Reprocessing

Annex XVI products

- harmonised standards for analogous devices with a medical purpose and based on similar technology provide the 'state of the art' when defining CS for Annex XVI products (Article 1(2) MDR)

Reprocessing of single-use devices

- in the absence of CS by 26 May 2020: reprocessing and reuse of single-use devices within a health institution or by an external re-processor must be compliant with relevant harmonised standards – subject to NB certification (Article 17(5) MDR)

Standards *verses* Common Specifications

Standards

1. Voluntary
2. Developed by Stakeholders
3. Provide specifications, methodology, recommended practises etc

Common Specifications

1. Mandatory*
2. Development initiated by public authorities
3. Mandate requirements and technical specifications

*Failure to apply must be duly justified



Some key standards

ISO 9001:2015

- ISO 5 year systematic review due in September 2020
 - various option need to be fully considered
- National Standards Bodies
- Annex SL/High Level Structure for all Management System Standards
- ISOTC 176 collating feedback on the use, application etc of ISO 9001:2015

ISO 13485:2016

- Original design specification followed the format of ISO 13485:2003 and ISO 9001:2008
- Did not follow Annex SL/High Level Structure (HLS)
- ISO 9001:2015 published in September 2015
- ISO 13485 failed at first DIS vote – much improved document for DIS 2
 - original objective was to publish before ISO 9001
- Number of actions agreed with ISO Technical Management Board (TMB)
 - 3 year systematic review, instead of the usual 5 year systematic review period
 - Engage with global regulators including IMDRF
 - Compile a Handbook and withdraw ISO 14969

ISO 13485:2016 continued

- Next revision due to commence 28th February 2019 – end of transition period
- Options for discussion, some research amongst users will be required:
 - Re-confirm with no changes for 5 years
 - Revise following analysis of the feedback – could be a major or minor revision
 - Complete revision
 - Reformat to the Annex SL/HLS with no changes to the normative requirements
 - Subject to scrutiny by ISO for alignment with High Level Structure (HLS)/Annex SL
 - May be others
- Preliminary discussions in the Working Group in Japan (October 2017) around engaging with global regulators, and some wider discussions.
- EN ISO version Harmonised November 2017 for Medical Devices Directives (3), further work as required as Annex Z's will require revision for Medical Devices Regulations

Handbook finalised and published – ISO HB 13485 September 2017, available from ISO

FprCEN/TR 17223

Guidance on the relationship between EN ISO 13485: 2016 (*Medical devices – Quality management systems – Requirements for regulatory purposes*) and European Medical Devices Regulation and In Vitro Diagnostic Medical Devices Regulation

- Relates to EN ISO 13485:2016
- Correlation of the MDR Articles, Annexes and applicable clauses of ENISO 13485:2016
- Basis for Annex Z's under the MDR for EN ISO 13485:201x
- Proposals received to undertake similar work for EN ISO 14971 & EN ISO 14155
- Publication expected 2nd qtr 2018

TEXT FINALISED MEMBER BODIES TO BE BALLOTTED

MDR Article 8 reference	MDR Article 8 text	MDR Annex reference	MDR Annex text	ISO 13485:2016 reference	Comments
5.	Manufacturers shall ensure that procedures are in place to keep series production in conformity with the requirements of this Regulation.			4, 5, 6, 7, 8	EN ISO 13485:2016 requires the quality management system to comply with applicable regulatory requirements but does not explicitly refer to the European regulations
	Changes in product design or characteristics and changes in the <u>harmonised</u> standards or CS by reference to which conformity of a product is declared shall be adequately taken into account in a timely manner.	Annex VIII 3.2 paragraph 2 c) indent 8	management of design or quality management system changes;	4.1.4, 4.2.4, 7.3.8	EN ISO 13485 includes general reference to regulatory requirements and standards as design and development inputs (7.3.3). Identification of new or revised regulatory requirements is identified as an input into Management Review (5.6.2) and changes needed as a result of such changes required as outputs of Management Review (5.6.3). Common specifications are not explicitly mentioned.
	Proportionate to the risk class and the type of device, manufacturers of devices, other than investigational devices, shall establish, document, implement, maintain, keep up to date and continually improve a quality management system that shall ensure compliance with this regulation in the most effective manner.	Annex VIII 1.	The manufacturer shall establish, document and implement a quality management system as described in Article 8(5) of this Regulation and maintain its effectiveness through the life cycle of the devices concerned. The manufacturer shall ensure the application of the quality management system as specified in Article 8(5) of this Regulation.	4.1	EN ISO 13485:2016 requires the quality management system to comply with applicable regulatory requirements but does not explicitly refer to the European regulations
			Manufacturers shall ensure the compliance with the provisions of this Regulation. All the elements, requirements and provisions adopted by the manufacturer for his quality management	1, 4.1, 4.2, 5, 6, 8	EN ISO 13485 requires that the effectiveness of the quality management system is maintained and provides requirements for improvement processes, but not that

Following ballot, comments reviewed and will be Published by CEN as EN

ISO 14971 – Medical Devices – Application of risk management to medical devices (ISO 14971:2007, Corrected version 2007-10-01)

ISO TR 24971:2013 Medical Devices – Guidance on the application of ISO 14971

*Current European Version EN ISO 14971:2012

ISO 14971:

Risk Management

- **Current status**

This standard is dual logo with IEC, and for IEC managed by Sub Committee 62A, and for ISOTC 210 managed by JWG 1, under ISO lead with alternating ISO & IEC Convenors

Systematic review started 15th October 2015, closed 15th March 2016, P members voting too confirm

JWG1 meeting in Tampa, Florida in June 2016, reviewed the comments and other business relating to Guide 63 and Health IT Software.

Comprehensive debate, including need for further guidance, and particular areas needing follow up, including review/update ISO TS 24971, with a suggestion that comprehensive guidance might address some of the issues raised during the meeting.

As a result and following consultations with ISOTC Chairman, Chairman IEC/SC 62A and the respective secretariats – the decision was made to defer a final decision to the ISOTC 210 Plenary meeting in November 2016 which is after the next IEC/SC 62A meeting in October 2016.

Result was to go for a minor revision to ISO 14971, and revise ISO 24971 – Guidance following publication of the standard.

Two documents now issued for comment & ballot (National Committees)

ISO/CD 14971 Medical devices — Application of risk management to medical devices, and

ISO TR 24971 ED2 Medical devices - Guidance on the application of ISO 14971.



ISO 14971 changes include

The defined terms have been updated.

The requirements have been clarified with more details, in particular regarding

- overall residual risk,
- the risk management report, and
- production and post-production information.

More attention is given to the benefits that are expected from the use of the medical device.

It is explained that the process described in ISO 14971 can be used for managing all risks associated with the medical device, such as those associated with biocompatibility, infection, data security, electricity, moving parts, or usability.

Several informative annexes have been moved from ISO 14971 to the guidance in ISO/TR 24971.

ISO 24971 – Guidance on the application of ISO 14971

Current status:

- **ISO/TR 24971** is also under revision, in parallel with the standard ISO 14971.
 - The Technical Report text has been reformatted into the same structure and numbering as the clauses and sub-clauses of the revised ISO 14971. This is intended to make the guidance more useful in understanding and applying the requirements of the standard. Informative annexes contain additional guidance on specific aspects of risk management.

ISO TR 20416:xxxx

- **Title – Medical devices – post market surveillance for manufacturers**
- **Scope (part)** – establish a common understanding of Post Market Surveillance and its intended use by manufacturers. Does not include market surveillance activities to be performed by national authorities nor actions legally required to be performed by manufacturers as part of post market surveillance or vigilance. Not intended to replace or change national regional legislation on PMS.
- **Introduction (part)** – TR PMS processes consistent with the requirements in ISO 13485 & ISO 14971
- **ISOTC 210 WG6** – currently have a working draft which the WG is developing

ISO NP 20417- Medical devices – requirements for general information to be provided by the manufacturer

- NWIP has been approved and ISO/TC 210 WG 2 will undertake the work
- EN 1041 needed revision and this will be incorporated into this international standard
- The aim is to publish in line with the end of the transition of the MDR

ISO 15223 - Medical devices – Symbols to be used with medical device labels, labelling and information to be supplied –



ISO 15223

Symbols

- ISO 15223 - Medical devices – Symbols to be used with medical device labels, labelling and information to be supplied –
Part I General requirements
Publication November - 2016
EN Version & Harmonised – 2017 (EUOJ 17 Nov 2017, page 389/29)
supersedes EN 980:2008, date of cessation of presumption of conformity of a superseded standard (31 Dec 2017)
- Part II Symbol Development, selection and validation
5 year systematic review closed 25th August 2016, result CONFIRM
One comment – process for new symbols, too complex
- ISO 7000 & ISO TC 145
- EU Medical Device Regulation - considerations for symbols proposal & development, UK proposals to be submitted to ISO TC210 WG3



ISO 15223 – Symbols activity

- Current version ISO 15223.2016
- EN version, Harmonised – status of EN 980 (superseded as of 1st January 2018)
- Some proposals to support MDR/IVDR and some extra
- Industry consultation on proposals
- UK submitted proposals in outline to ISOTC 210 WG3 – the WG members have reviewed/commented – 89 pages of comments will be reviewed by WG.
- ISO 15223.2 obligations have not been completed


UK Proposals include:

- Universal Device Identifier – UDI – 23.2.h
- Information available in machine readable format – 23.1.c
- Electronic Instructions for Use – alt. to ISO 7000:3500
- Medical Device – 23.2.q
- Devices without a medical purpose
- Importer – article 13.3
- Incorp/contains blood products – 23.2.e
- Contains medicinal substance – 23.2.e
- Contains CMR substances – 23.2.f
- Contains Nano material – 20.4
- Contains cell of Human Origin – 23.2.e
- Contains Animal (Non human Tissue) – 23.2.e
- Sterilization by Vapour Phase – used by ISO 11140
- Duration of Continuous Use
- Reprocessing Cycles – 23.2.o
- Reconditioned by the manufacturer only – 23.4.o
- Sterile packaging damaged or unintentionally opened prior to use – 23.3.j
- Single Patient Use
- Breaching compromises sterility – 23.3.a




NWIP Symbol proposals for next revision of ISO 15223

Annex A
Proposed symbols for inclusion in ISO 15223-1

3. Proposed symbol for Electronic Instructions for Use

Item	Symbol	Title	Legislative Ref	Submitter's Comment
4		Electronic Instructions for Use		ISO 7000 Symbol 3500.

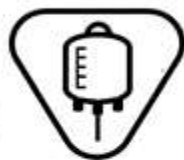
4. Proposed symbol for Medical device

Item	Symbol	Title	Legislative Ref	Submitter's Comment
5		Medical Device (1)	MDR, Annex 1, 23.2, q.	<i>Preferred option as the acronym is widely used.</i>
6		Medical Device (2)	MDR, Annex 1, 23.2, q.	Rod of Asclepius
7		Medical Device (3)	MDR, Annex 1, 23.2, q.	

Incorporates medicinal substances, blood derivatives, human tissues, animal tissues

Rx, AT, etc.

MDR, Annex I, 23.2, e.




DO NOT USE




NWIP Symbol proposals for next revision of ISO 15223


Annex A
Proposed symbols for inclusion in ISO 15223-1

13		Distributor (5)		This aligns well with item 16, as the two symbols are 'opposites' of each other.
14		Distributor (6)		

7. Proposed symbol for Importer

Item	Symbol	Title	Legislative Ref	Submitter's Comment
15		Importer (1)	MDR, Article 13.3	
16		Importer (2)	MDR, Article 13.3	This aligns well with item 13. Alternatively, could there be a symbol to align with item 9, e.g. → 
17		Importer (3)	MDR, Article 13.3	

8. Proposed symbol for Contains or Incorporates Blood Products

Item	Symbol	Title	Legislative Ref	Submitter's Comment
18		Contains or Incorporates Blood Products (1)	MDR, Annex 1, 23.2, e.	This implies the presence of Haemoglobin only, and could be misleading.

Information for Users (Labeling/IFU)

Labeling requirements (23.2)

Label must have indication if the device incorporates:

Medicinal substance

Human blood/plasma derivative

Tissues/cells/derivatives of human origin

Tissues/cells/derivatives of animal origin

Indication if carcinogenic/mutagenic/toxic (CMR) substances

UDI carrier according to Article 24, Annex V

Indication if the device is a reprocessed single use device

“Indication that the device is a medical device.”

Identification of absorbed or locally dispersed elements

Many of these requirements do not yet have harmonised symbols

Reference Number			
SPR	MDD	AIMDD	Other
23.2a	13.3b	14.2, part 1	-
23.2b	13.3b	14.2, part 2 & 3	-
23.2c	13.3a	14.2, part 1	-
23.2d	13.3a	-	-
23.2e	13.3n	14.2, part 11	-
23.2f	7.5	-	-
23.2g	13.3d	11	-
23.2h	-	-	-
23.2i	13.3e	14.2, part 9	-
23.2j	13.3 (l)	-	-
23.2k	13.3i	-	-
23.2l	13.3c, 13.3m	-	-
23.2m	13.3k	-	-
23.2n	13.3f	-	-
23.2o	-	-	-
23.2p	13.3g	14.2, part 6	-
23.2q	13.3h	14.2, part 5	-
23.2r	-	-	-
23.2s	13.3d	-	-

(a)

Super Balloon®

Drug Coated Coronary Dilatation Catheter

(c)



Acme Device

0086 First Street
 OutofthisWorld, Anywhere 00086
 USA
 866.YYY.ZZZZ
 www.acme-device.com

(d)



EU Representative, Inc.
 XX la Boulevard
 Country ZZZZZ
 EU
 +XX - PHONE

PN-XXX-YY-A

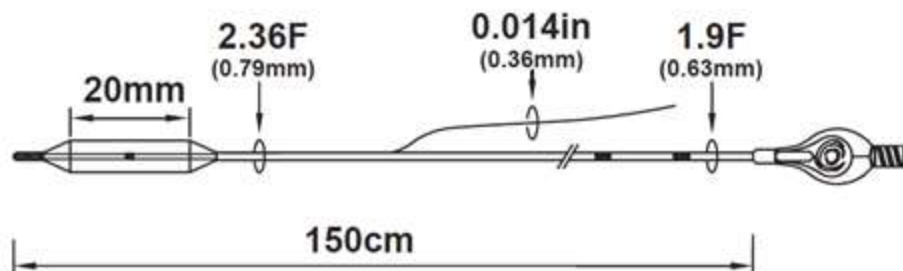
(b)

Rapid Exchange, 150cm, 1.5 mm
 diameter, 0.014 Guidewire compatible
 guidewire

CE
 0086

0.056in
 (1.42mm)

1.5mm



(i)

(g)

REF

2015-150RX-XYZ



2020-11

LOT

XXXXXXXXXX

(m)



Do not inflate above rated burst pressure

(e)

(e)

(q)



(21.1 c)



(k)



(n)

STERILE

(l)



(h)



Sample template of the data and information required for each proposed symbol – as required by ISO 15223.2

Usability

Symbol 1: *Insert name*

Description of symbol

This symbol indicates...

Statement of need

The benefit of introducing this symbol is... (e.g., avoid multiple languages)

Regulatory – only EU or further afield? (see 4.1/2 of 15223-2).

The target audience of this symbol is... (e.g. profession users, lay users), with [insert level of training/knowledge] and [experience with medical devices].

The symbol has a horizontal application to a wide range of medical devices/ restricted range of device types.

Risk assessment

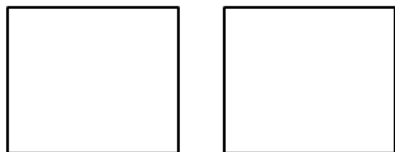
The risk associated with this symbol is [insert risk level]. This is because...

identification of any particular considerations such as orientation which can affect legibility, reproduction or understanding

Existing/related symbols

Are there already any symbol(s) with a similar meaning standardized? Or symbols we have based the proposed design on?

Design concepts for symbol



Feedback we have received on initial analysis of symbol:

Description of Symbol

Statement of need

Risk Assessment/

Existing or related symbols

Design concepts for the symbol

Expert's involvement key



With work necessary on 300+ standards experts needed to step forward:

- Support BSI committees
- Support WGs
- Come forward with proposals
- Regulatory experience

Summary

- European Standards & Harmonisation
 - Significant volume of work to revise
 - Timing and Scheduling
- Standards under development
 - Monitor the activity and access documents when available, to provide an early insight to the changes being proposed
- Symbols
 - Industry effort required to develop, they are needed for MDR Compliance



Article 18 CE marking of Conformity
4) "CE mark may be followed by a pictogram or other mark indicating a special risk of use"



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NOTE: some material contained in this
presentation is taken from the EC Seminar
Presentations – 21st September 2017





**Thank you for
your time and
attention**

Questions?

