



# **Medical Device Regulations: impact and implications**

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# Agenda

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Why

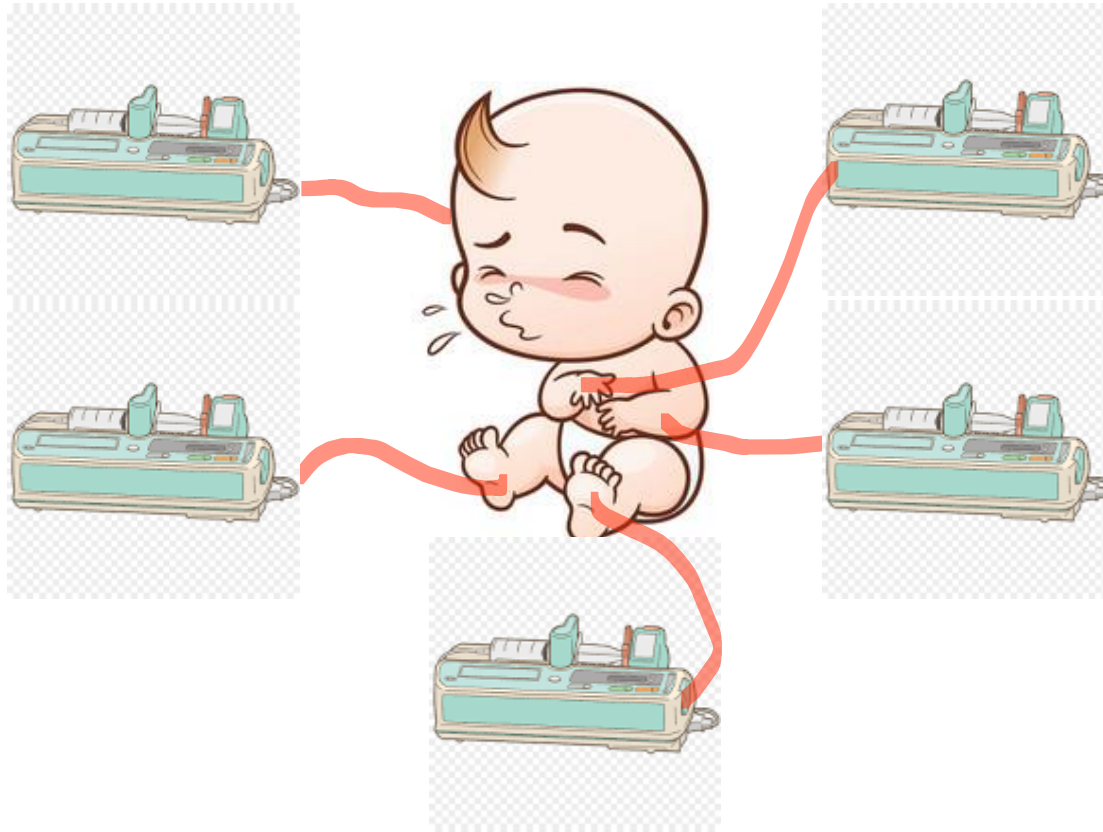
Changes

Implications

Timeline

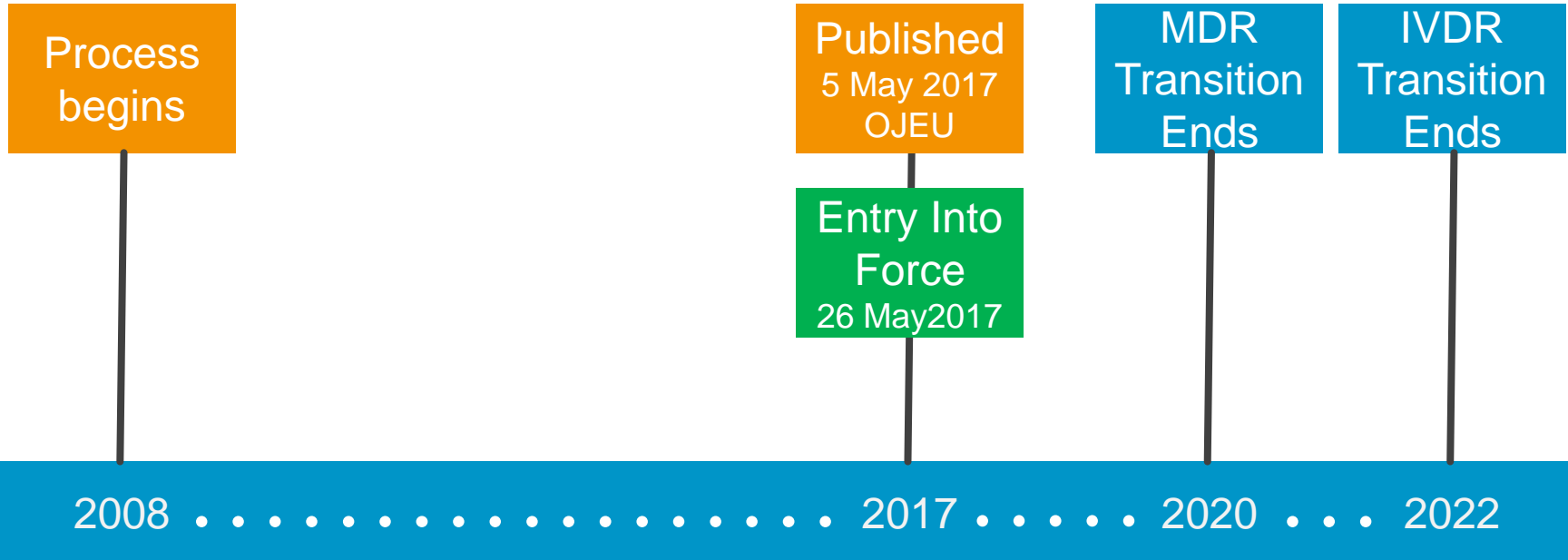
# Story

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# Regulations development

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# The path

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**2002**  
first weaknesses



**2007**  
MDD revised



**2010**  
tipping point



**2012**  
initial version



**2014**  
amendments



**2015**  
EC version



**2016**  
compromise



**2017**  
final version



More

# Where to find the MDR

Official Journal		L 117
of the European Union		
		
English edition	Legislation	Volume 60 5 May 2017
Contents		
1 Legislative acts		
REGULATIONS		
<ul style="list-style-type: none"><li>• Regulation (EU) 2017/745 of the European Parliament and of the Council of 5 April 2017 on medical devices, amending Directive 2001/83/EC, Regulation (EC) No 178/2002 and Regulation (EC) No 1223/2009 and repealing Council Directives 90/385/EEC and 93/42/EEC (*) 1</li><li>• Regulation (EU) 2017/746 of the European Parliament and of the Council of 5 April 2017 on in vitro diagnostic medical devices and repealing Directive 98/79/EC and Commission Decision 2010/227/EU (*) ..... 176</li></ul>		

# Directive vs. Regulation

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## EU DIRECTIVES

Lay down certain end results that must be achieved in each member state however the countries are free to decide how to implement these.

VS.

## EU REGULATIONS

Are direct EU law(s), applicable as soon as they are passed and are legally binding in all member states as part of their national law.

## MDD vs. MDR

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Medical  
Devices  
Directive

60  
pages

Active  
Implantable  
Directive

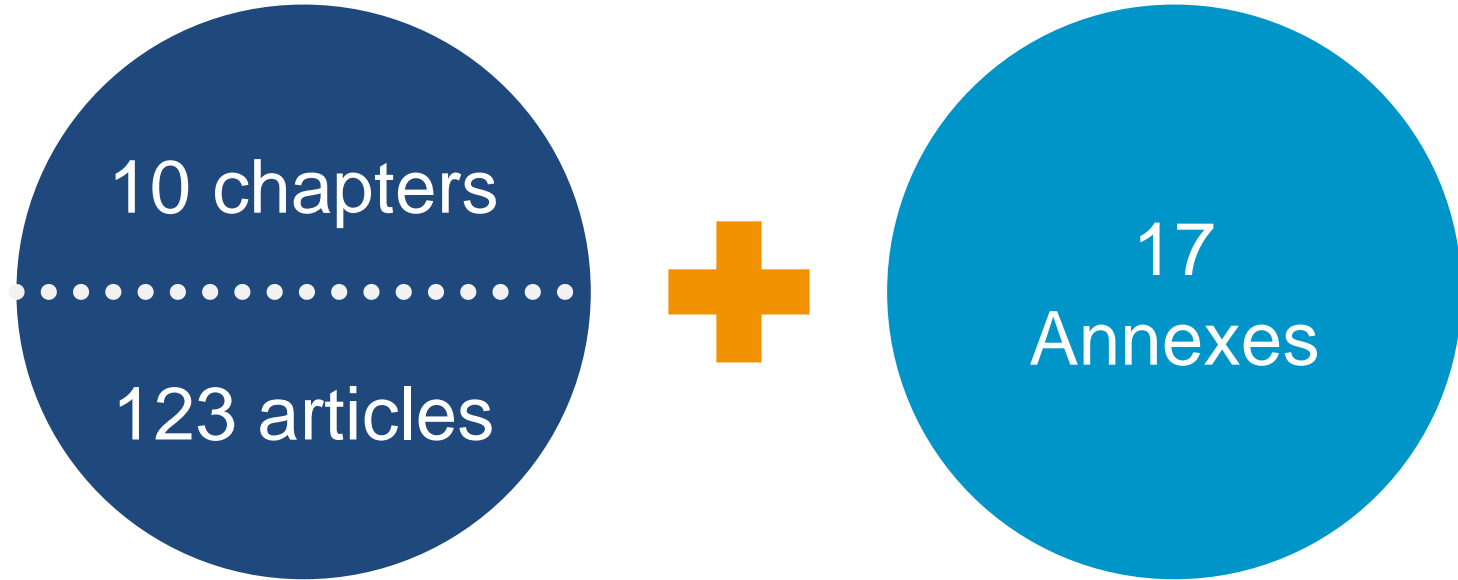
35  
pages

Medical  
Devices  
Regulation

177  
pages



The documents are large and very  
complex



# What's similar?

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Essential requirements

Risk Based Classification

Use of standards

Third party review

# What's changed?

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Safety & performance requirements

Additional classification rules

Clinical evaluation strengthened

Post market surveillance increased

Scrutiny

Transparency

## What does this mean?

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More data

Stricter reviews

Vigilance

Surveillance

Transparency  
Traceability

Governance

# Annex 1: General Safety & Performance Requirements

Software (inc. standalone), privacy and security (cyber)

Devices with a medicine or biological function

Biological safety / specified chemical carcinogens / hormones etc.

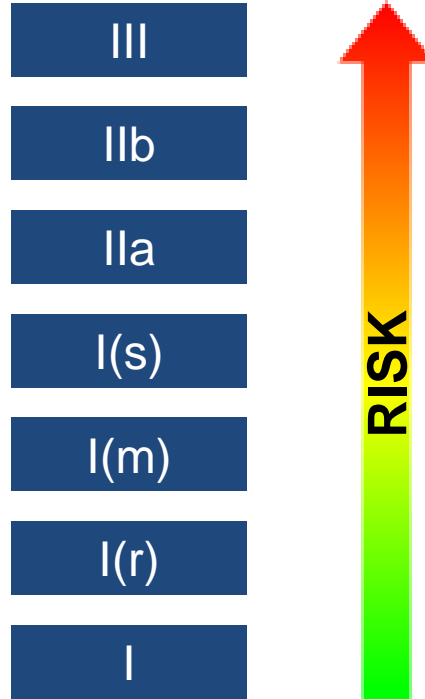
Label & Information

Standards / other sources like European pharmacopeia

Lay people risks

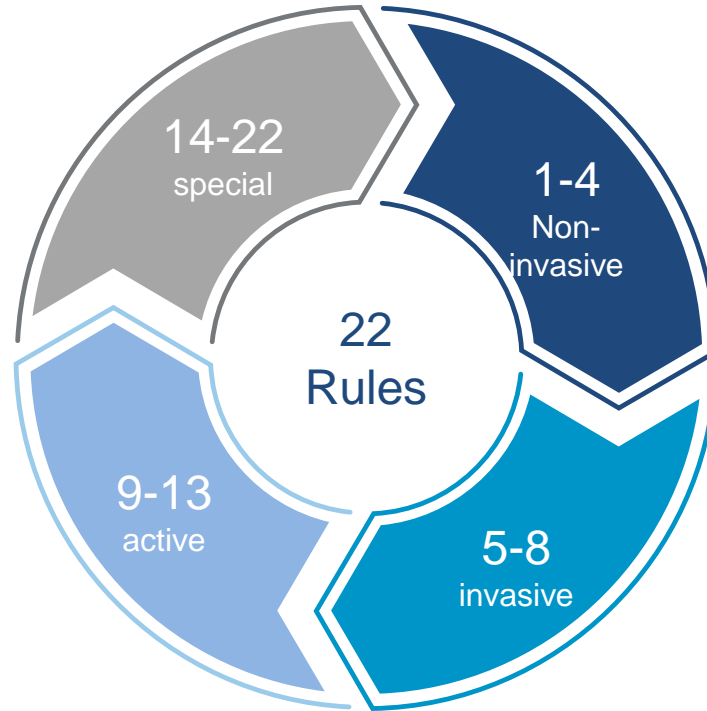
Cleaning, sterilisation & disinfection (contamination or microbial state)

## Device - Classes



# Annex VIII - Classification

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## Details - Classes

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Reusable  
surgical  
instruments

Custom  
devices

Software

Wound  
dressings



# Clinical evidence

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Report

Evaluation

Data

# Clinical evaluations

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Clinical Evaluation Report (MEDDEV 2.7/1 Rev 4)

Benefit/Risk evaluation

Will be scrutinised (data & methodology) by NB & CA

Increased data requirements

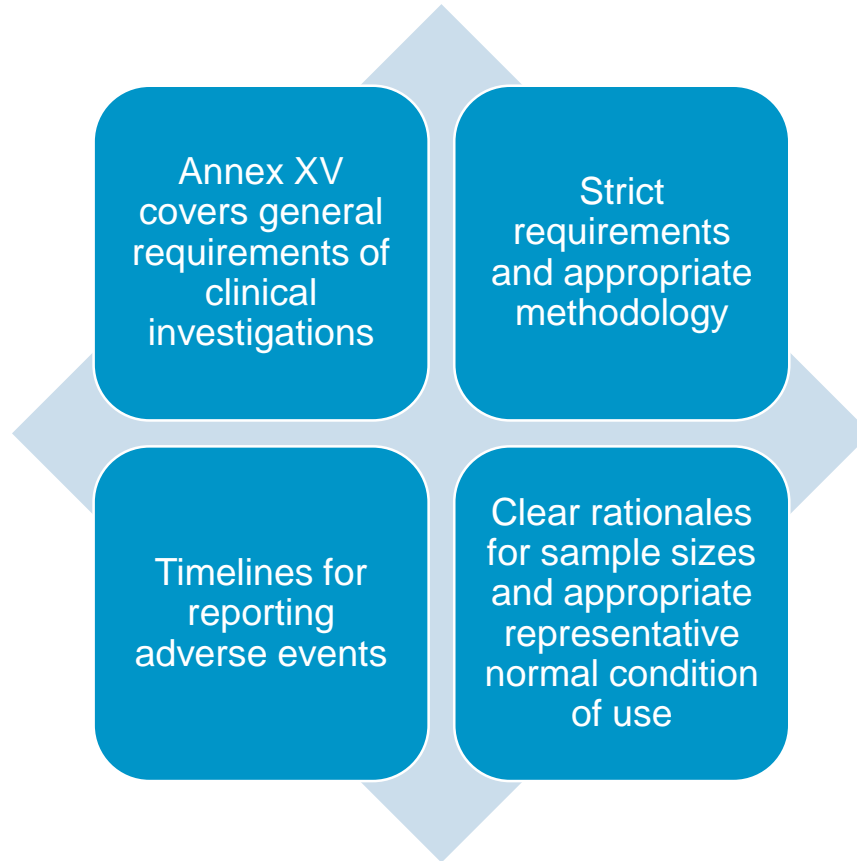
Data will only be accepted from equivalent device (biology/technical/ clinical)

Equivalent device(s) need full access to Technical Files and Data

Many current “equivalent devices” will no longer be accepted

# Clinical investigations

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# Post-market

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ISO13485

MDR

Surveillance  
plan

Follow-up  
(PCMF)

Market  
surveillance

Update  
reports

# Key Players

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# Traceability requirements

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Manufacturers  
information

UDI for  
each device

Devices,  
information,  
clinical  
investigations,  
incidents etc.

Update  
reports

Using EUDAMED

# Obligations of the manufacturer (EUAR / EO)

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Ensure devices are designed and manufactured in accordance with the regulation ( MDR/QMS)

Establish, execute, maintain and document a system for risk management (MDR/QMS/14971)

Gather clinical evidence, including post-market clinical follow-up (ISO14155 & MEDDEV 2.7/1 Rev 4 & MDR Annexes)

Prepare and update the technical documentation

Qualified personnel RA/QA

# Steps to Compliance

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## Impact on existing devices

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**NO  
ENTRY**

## Impact on existing devices

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No Grandfathering

Must be State of the Art

Must have Clinical evidence

Quality Management System

Correct Labelling

RoHS/WEEE/REACH considerations

## Grandfathering?

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“A grandfather clause is a provision in which an old rule continues to apply to some existing situations while a new rule will apply to all future cases.

Those exempt from the new rule are said to have grandfather rights or acquired rights, or to have been grandfathered in.” - Wikipedia

## State of the Art?

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“State of the art means what is currently and generally accepted as good practice” – ISO14971 Annex D.4

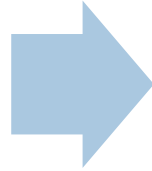
Some examples on how to ensure your device is state of the art:

- use of current standards for the same or similar devices
- best practices as used in other devices of the same or similar type
- Results from accepted scientific literature

# Clinical Evidence?

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Clinical justifications  
based on device  
equivalence to be less  
accepted



Expected to show:

- Technical
- Biological
- Clinical

## QMS

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QMS necessary  
to achieve  
compliance



MDR article 10, clause 9

QMS to address at least:

- Risk Management
- Clinical Evaluation
- Product Realisation especially design controls
- Verification of UDI
- Plan, Implementation and maintenance of PMS system
- Communication with stakeholders
- Process of reporting
- Process of monitoring and product improvement

# Business Risk & implications

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Risk of having non compliant product

Compliance planning / timelines

Reclassification / up-classification of products

Technical File revisions

Reduced Notified Body capacity

Vigilance and Post Market Surveillance

UDI and registration of products

Increase resources (budget, training, outsourcing, testing etc.)

# Other considerations

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EUDAMED

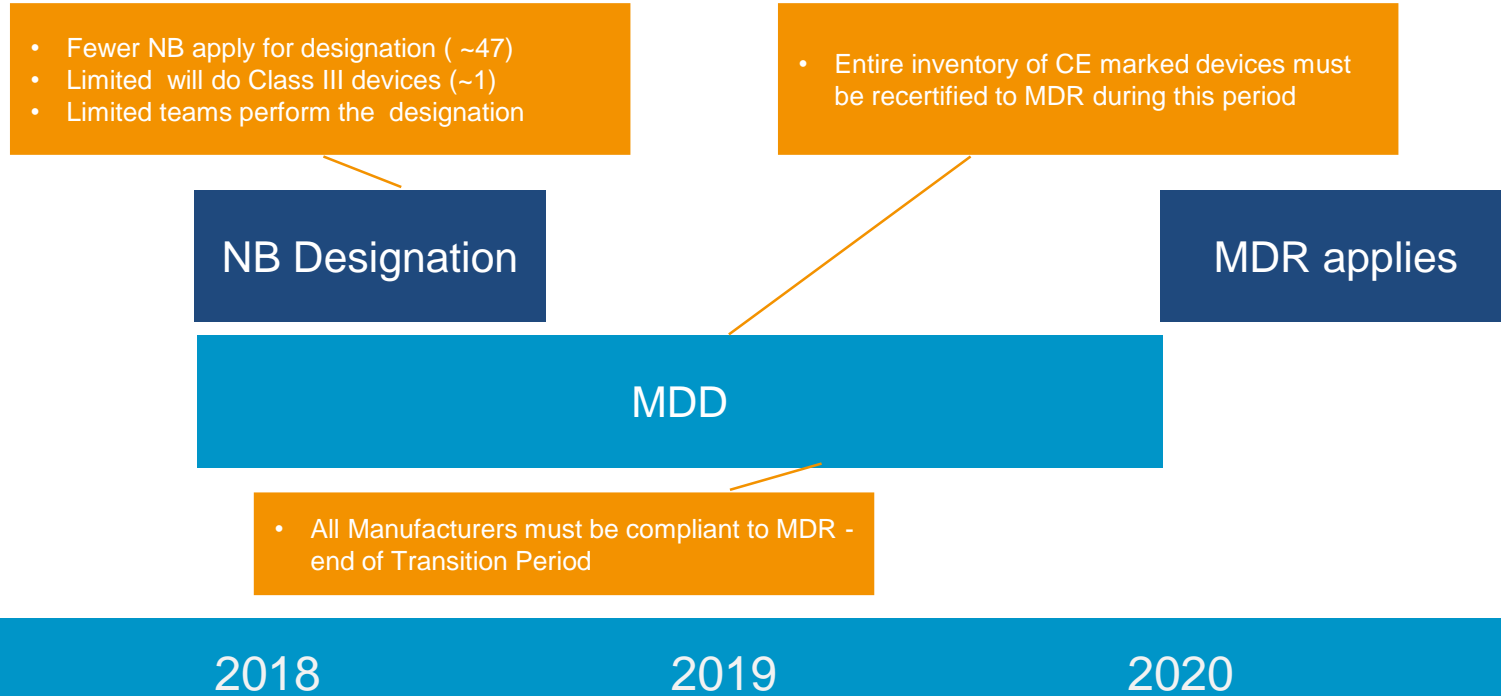
Common  
Specifications

BREXIT

Resources



# Transition timeline



# Timelines

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26 May 2017	MDR 2017/745
26 November 2017	Notified Bodies designation
26 March 2020	EUDAMED go live date
26 May 2020	MDR date of application
26 May 2022	IVDR date of application
26 May 2024	AIMD, MDD and IVDD certificates become void
26 May 2025	no devices may be put into service in Europe using MDD, AIMD or IVDD certificates

# So ... are you ready?

# Questions