

May 21, 2019

# EUROPEAN MEDICAL DEVICE REGULATION

## CASE - BEST PRACTICES OF MDR IMPLEMENTATION

JOACHIM WILKE

**Medtronic**  
Further, Together

1

### CASE STUDY

#### COMPANY: ABC

2 Business Units, 2 QM Systems, 2 Notified Bodies

- 5 Class III devices
- 5 Class III Tech. Doc. files
- 2 Class III products : 80 class III revenue
- 1 HIPO innovative Class III product in development

- 50 Class II b/a
- 1 Class II b implant, 1 Tech. Doc. file
- 8 Class IIa/b Tech. Doc. Files
- 20 class II a/b products: 80 revenue
- 10 HIPO iterative class II non implantable in development

- 15 class I
- 10 Class I Tech. Doc Files
- 5 class I reusable surgical instruments

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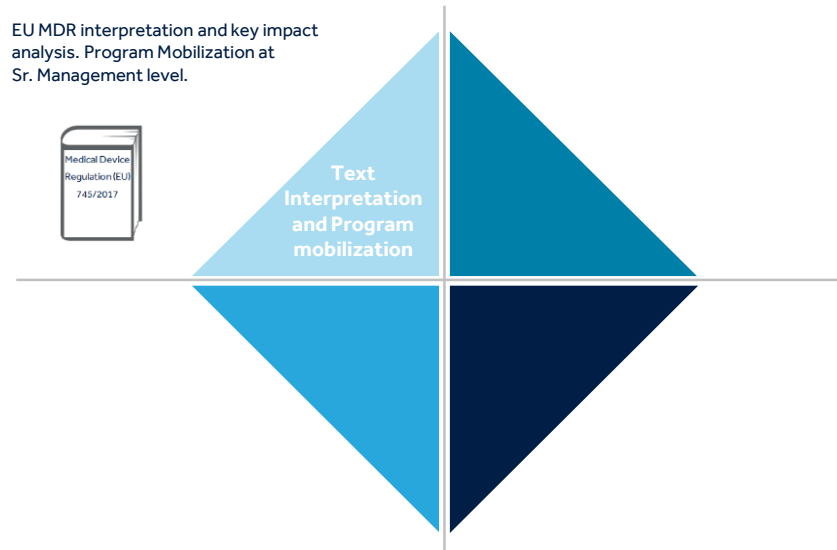
## FOUR IMMEDIATE FOCUS AREAS

### REGULATORY AFFAIRS: THE SPEARHEAD

EU MDR interpretation and key impact analysis. Program Mobilization at Sr. Management level.



Text  
Interpretation  
and Program  
mobilization



3

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## EU MDR IMPLICATIONS

### NEW AND LEGACY PRODUCTS ARE AFFECTED

Key EU MDR Changes	Business Implications	Implicated Business Functions
<b>Restricted Equivalence Claim</b> (in particular Class III and Implants)	➡ Revenue impact from loss in portfolio	➡ R&D Supply Chain
<b>New (up-) classification</b>		
<b>Hazardous Substances</b> Tightened Requirements		
<b>„Scrutiny“ – EU Panel</b> Clinical data review	➡ Increased Time To Market	➡ R&D Regulatory Clinical
<b>Notified Body Design Review for</b> Class IIb Implants		
<b>Technical Documentation, DoC</b> New Format and Content, UDI linkage	➡ Administrative Burden	➡ R&D Regulatory, Tech. Communication, Production/Supply Chain
<b>Expanded Labelling Requirements</b> (including Implant-Information)		
<b>QM-System:</b> PMS, Vigilance, PSURs, Trend Reports	➡ Increased Transparency and Documentation	➡ Quality Medical safety Regulatory
<b>Clinical Study Reports</b> <b>Summary of Safety and Performance</b>		
<b>EUDAMED:</b> Economic Operator registration, UDI linked device registration		➡ Regulatory, Supply chain

4

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## GLOBAL PORTFOLIO IMPACT

### EU MDR PROPOSED CHANGES ARE EXTENSIVE

EU MDR affects global CE-mark based regulatory registrations



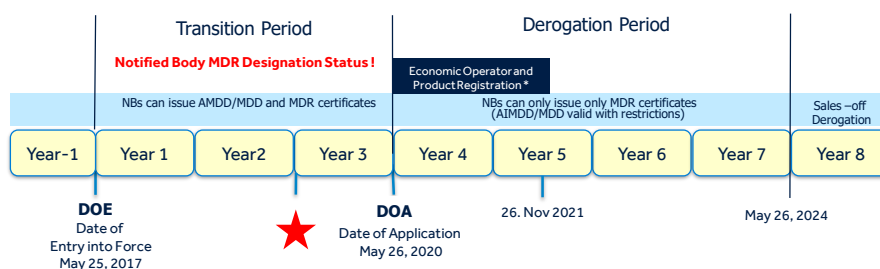
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## EU MDR TRANSITION PROVISIONS



\*if EUDAMED is functional at DOA

UDI Labeling:

- a. Class III + Implants: 1 year after DOA
- b. Class IIb/ IIa : 3 years after DoA
- c. Class I: 5 years after DoA

Direct UDI Labeling of reusable devices 2 years after the relevant date for the respective product class.

6

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## NOTIFIED BODIES – STATE OF THE PLAY

Received Applications at DG Sante	Joint on-site Audits	Received CAPA Plans at JAT	Final JAT Assessments	Notification in NANDO
47 (MDR: 38)	32 (MDR: 26)	11 (MDR: 9)	2 (MDR: 2)	1 (MDR: 1)

Expectation: 10 – 12 Bodies notified in NANDO by the end of 2019

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## CONFORMITY ASSESSMENT – RECENT NEWS

### MDCG 2019-3

The CECP (Clinical Evaluation Consultation Procedure) acc. to Art. 54 is not applicable to already AIMDD/MDD certified devices.

Concerned devices are:

- (a) class III implantable devices, and
- (b) class IIb active devices intended to administer and/or remove a medicinal product, as referred to in Section 6.4 of Annex VIII (Rule 12).

[https://ec.europa.eu/growth/sectors/medical-devices/new-regulations/guidance\\_en](https://ec.europa.eu/growth/sectors/medical-devices/new-regulations/guidance_en)

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## LABELING/SYMBOLS – RECENT NEWS

Final Selected MDR Symbols									
Selected Description	Medical device	Contains human blood or plasma derivatives	Contains a medicinal substance	Contains biological material of animal origin	Contains biological material of human origin	Importer	Distributor	Contains hazardous substances	Contains nano materials
Selected Symbol									

Final Selected MDR PIC Symbols					
Selected Description	Medical device	Person identification	Patient information website	Date	Health care center or doctor
Selected Symbol					

Medtronic developed and validated symbols

Sterile Barrier Symbols			
Selected Description	Single sterile barrier system	Double sterile barrier system	Single sterile barrier system with protective packaging inside
Selected Symbol			

Additional MDR Symbols		
Selected Description	Single patient - multiple use	Translation
Selected Symbol		

### Additional MDR symbols:

The following Sterile Barrier Symbols (SBA) and additional MDR symbols have been selected.

Use of above symbols is less common.

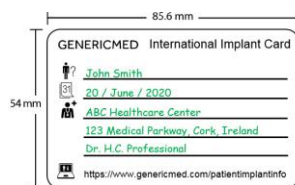
9

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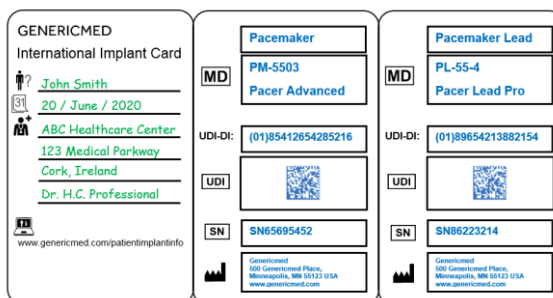
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## IMPLANT CARDS – RECENT NEWS



Back – Not to Scale (Blank – Serial printed content in product)



10

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## UDI – RECENT NEWS

**MDR Device**

**Basic UDI-DI & UDI-DI attributes**

**Basic UDI-DI set of data in UDI database**

**Principle:** Each UDI-DI inherits the attributes of its linked Basic UDI-DI and devices DI

**Basic UDI-DI**

- Applicable legislation (MDR) (\*)
- 2. Basic UDI-DI value (\*)
- 2b Basic UDI-DI Issuing entity (\*)
- 6. Manufacturer SRN (\*)
- 5. Name and address of manufacturer
- 7. Name and address and SRN of AR
- 9. Risk class (\*)
- Implantable (Y/N) (\*)
- For IIB implantable: Suture, staple, dental filling, dental brace, tooth crown, screw, wedge, plate, wire, pin, clip, connector (Y/N)
- Measuring function (Y/N) (\*)
- Reusable surgical instrument (Y/N) (\*)
- Active device (Y/N) (\*)
- Intended to administer/remove a medicinal substance (Y/N) (\*)
- 11. A. Name and/or, if applicable, device model that identifies the device(s) with this BASIC UDI-DI in the technical documentation and/or certificate or declaration of conformity (Name and/or model shall be provided)

**UDI-DI**

- 0. UDI-DI value (\*)
- 0b. UDI-DI Issuing Entity (\*)
- Issuing entity (value and issuing entity)
- 11.B. Reference, Article or Catalogue number (\*)
- Device with Direct marking (Y/N) (\*)
- Direct marking UDI-DI value (\*)
- 01. Quantity of device(s) (\*)
- 03. Type of UDI-DI (\*)
- 04. Unit of use UDI-DI (\*)
- 12. Clinical size (\*)
- 14. Storage/handling conditions
- 10-15. Name(s)/Trade name(s) (including languages)
- 13. Additional product description
- 22. URL for additional information
- 16. Labelled as single use (Y/N) (\*)
- 17. Maximum number of reuse (\*)
- 18. Device labelled as sterile (Y/N) (\*)
- 19. Need for sterilisation (Y/N) (\*)
- 20. Containing latex (Y/N) (\*)
- 21. CBR/Endocrine disruptor
- 23. Critical warnings or contra-indications
- 08. Medical device nomenclature (CMD) code (1)
- 24. Status
- 25. (A.2.6) Reprocessed single-use (Y/N) (\*)
- 26. (A.2.13) Annex XVI (\*)
- 27. (A.2.13) In the case of devices designed and manufactured by another legal or natural person as referred in Article 10(15): the name, address and contact details of that natural/legal person

**UDI-Dis (container package DI)**

- 0. UDI-DI value (\*)
- 0b. Issuing entity (\*)
- 1. Quantity per package (\*)
- 24. Status

(1) Nomenclature decision:  
<https://ec.europa.eu/docsroom/documents/34264>

(\*) may not be changed

- Mandatory
- Mandatory if applicable
- Optional

Version April 2019

11

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## UDI – RECENT NEWS

Commission on Nomenclature

In accordance with Articles 23 IVDR and 26 MDR, having due regard to the views provided by the MDCG, **the CND nomenclature, to be mapped to the GMDN nomenclature, will be made available in the future Eudamed.**

<https://ec.europa.eu/docsroom/documents/34264?locale=en>

MDCG - Registration of device data elements and legacy devices

**MDCG-2019-4:** Device registration applies 18 months after the general application date or, if EUDAMED is not fully functional on time, from 24 months after the date of publication of the notice on Eudamed functionality.

**MDCG 2019-5:** MDCG considers it appropriate to adapt the Eudamed design to allow the registration of legacy devices in Eudamed in the absence of a (Basic) UDI-DI.

[https://ec.europa.eu/growth/sectors/medical-devices/new-regulations/guidance\\_en](https://ec.europa.eu/growth/sectors/medical-devices/new-regulations/guidance_en)

12

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## FOUR IMMEDIATE FOCUS AREAS

### COLLABORATE APPROACH OF MANY FUNCTIONS

EUMDR interpretation and key impact analysis. Program Mobilization at Sr. Management level.



**Text Interpretation and Program mobilization**

Formation of cross functional program team(s) incl. RA, QA, R&D, Medical/Clinical, Marketing, Finance. Intracompany communication plan including training and risk escalation process. Designation of responsibilities.

**Form Program Team and Assess budget**

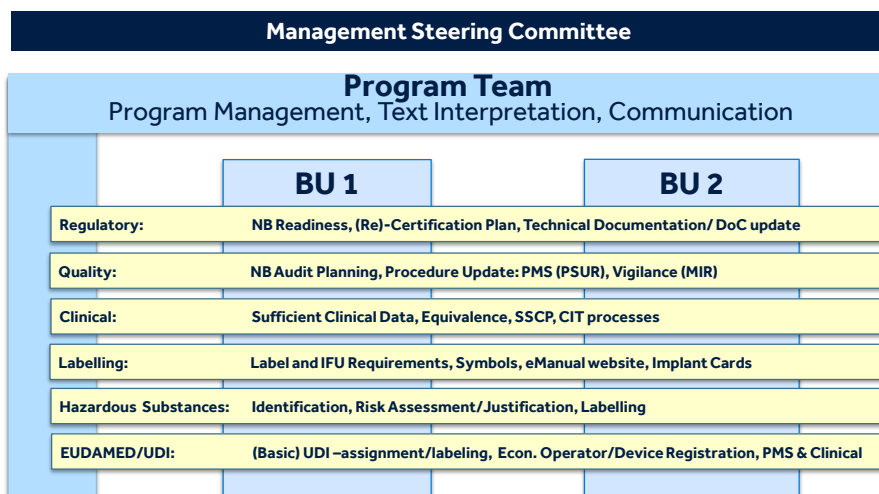
13

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## ABC CROSS BU COLLABORATION



ABC decided to have a cross BU approach on pre-defined implementation activities.

14

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14

## FOUR IMMEDIATE FOCUS AREAS

### MITIGATE FINANCIAL IMPACT

EUMDR interpretation and key impact analysis. Program Mobilization at Sr. Management level.



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**Form Program Team and Assess budget**

Project Management	
Project Tasks	
Task Name	Start Date
Task 1	2019-01-01
Task 2	2019-01-01
Task 3	2019-01-01
Task 4	2019-01-01
Task 5	2019-01-01
Task 6	2019-01-01
Task 7	2019-01-01
Task 8	2019-01-01
Task 9	2019-01-01
Task 10	2019-01-01

**Portfolio Rationalization**

Product	Status
Product 1	Active
Product 2	Active
Product 3	Active
Product 4	Active
Product 5	Active
Product 6	Active
Product 7	Active
Product 8	Active
Product 9	Active
Product 10	Active

RA/Finance product portfolio analysis primary budget estimation. Program monitoring scorecards.

15

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## ABC KEY LEVERS TO MITIGATE FINANCIAL IMPACT

### 1. TECH DOC PRIORITIZATION

- **Prioritization at Tech File level**
- **Business Case for Each Tech File**

### 2. PORTFOLIO RATIONALIZATION

- **Must Have: REMEDIATE or REPLACE**
- **Can go : RETIRE**
- **TBD Products: REMEDIATION ?**

### 3. STRETCH COMPLIANCE TIMELINE

- **Spread spending over multiple years**
- **Renew under old MDD till FY 19/20**
- **Maximize use of MDD certs (2021-24)**

### 4. GO AFTER BIG TICKET COST DRIVERS

- **Clinical Investigations**
- **Hazardous Substances**
- **Labelling**

ABC decided to focus on four areas to mitigate cost impact

16

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## PORTFOLIO RATIONALIZATION AND PRIORITIZATION

Multiple criteria to be considered

Sales &  
Marketing  
Priorities

Availability of  
Clinical Data

Technical  
Documentation  
Integrity

Management  
Discretion

17

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17

## ABC PRODUCT PORTFOLIO ANALYSIS

<ul style="list-style-type: none"> <li>• 5 Class III devices</li> <li>• 5 Class III Tech. Doc. files</li> <li>• 2 Class III products : 80 class III revenue</li> <li>• 1 HIPO innovative Class III product in development</li> </ul>	<ul style="list-style-type: none"> <li>• 50 Class II b/a</li> <li>• 1 Class II b implant, 1 Tech. Doc. file</li> <li>• 8 Class IIa/b Tech. Doc. Files</li> <li>• 20 class II a/b products: 80 revenue</li> <li>• 10 HIPO iterative class II non implantable in development</li> </ul>
<ul style="list-style-type: none"> <li>• 15 class I</li> <li>• 10 Class I Tech. Doc Files</li> <li>• 5 class I reusable surgical instruments</li> </ul>	

ABC found after discussions with their NBs that only one of their high seller class III products meets the new expectations for clinical data, i.e. is supported by clinical investigation data.

They therefore decided to **re-certify** the other class III high seller product **under MDD** and initiate a post-market clinical investigation to support its MDR certification later during the derogation period with this study.

However, they will **discontinue to market the other 3 low seller class III devices** and **focus on the class III HIPO product in R&D**.

18

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18

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ABC will also **collect more clinical data for their implantable class IIb implant** product as its sales contributes significantly to company revenue.

Since this product is already on the market for a long time ABC considers to **conduct a survey study** at three clinics where the product has been frequently used as already pre-discussed with the respective NB.

Further ABC plans to support the MDR certification of the **other class II b/a products** with existing clinical evaluation data.

Final decisions were taken based on discussions with the company's NB identifying **common understanding what "sufficient clinical data"** are expected for these products.

19

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19

## ABC PRODUCT PORTFOLIO ANALYSIS

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ABC also intends to keep their class I products on the market.

Accordingly they will update the TD and labeling of these products to the MDR requirements before DOA.

For their reusable surgical instruments they will apply for MDR certificate within the 3 year transition period. However the MDR readiness may well jeopardize this plan.

20

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## FOUR IMMEDIATE FOCUS AREAS

### Cross BU Notified Body Approach

EUMDR interpretation and key impact analysis. Program Mobilization at Sr. Management level.



Text  
Interpretation  
and Program  
mobilization

Formation of cross functional program team(s) incl. RA, QA, R&D, Medical/Clinical, Marketing, Finance. Intracompany communication plan including training and risk escalation process. Designation of responsibilities.

Program team  
and  
Communication  
Plan



Coordinated approach of BUs. Early contact to NBs regarding their MDR designation, legacy device clinical data requirements and (re)-certification planning for QMS and product certificates.

Recertification  
Plan and  
Notified Body  
approach

Portfolio  
Rationalization  
and Budget Plan

RA/Finance product portfolio analysis primary budget estimation. Program monitoring scorecards.

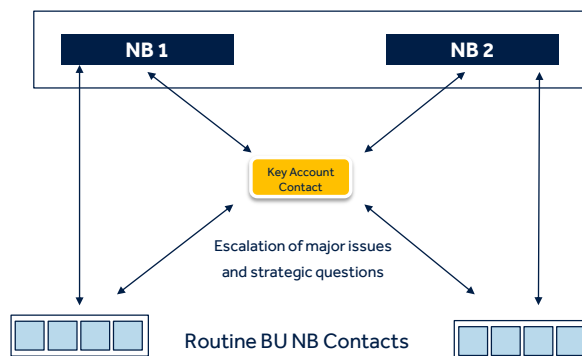
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## ABC NOTIFIED BODY COMMUNICATION MODEL



ABC decided to have **one contact person for both NBs** the company has contracted to discuss strategic question and major issues with high level NB management.

At the same time ABC continues to execute operational and tactical detailed activities directly between BU experts and respective NB counterparts.

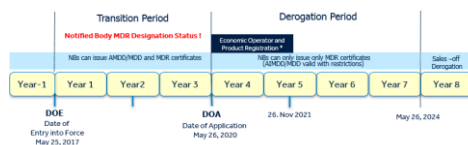
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## ABC (RE)-CERTIFICATION PLAN



ABC considers the following (re) certification process:

1. They will apply for **MDR certification** of their **high seller class III product** supported by clinical investigation data **before DOA** and use this product technical documentation as a template for their QMS MDR certification.
2. They will also apply for **QMS MDR certification before DOA** to support the MDR certification of their HIPO class III device scheduled shortly after DOA. However **their MDD QMS certificates will be renewed** as well to make full use of the Derogation Period.
3. The **other high sales class III product and the implantable class IIb product** will be MDD re-certified before DOA and transferred to MDR during the Derogation period adjusted to the timeline when the post – market clinical study or the survey studies are finished.

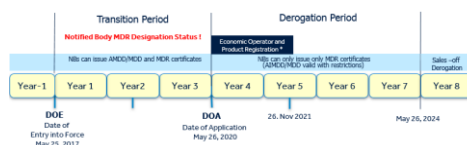
23

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## ABC RE-CERTIFICATION PLAN



4. **Class IIa/b products** will be **moved step by step from MDD to MDR** as soon as their labeling and technical documentation including CER has been updated to be MDR compliant after the MDR QMS certs have been granted.

Some products with low sales volume may be discontinued in case NBs require additional studies for clinical data. **The post DOA MDD QMS certificate expiry date shall be met.**

5. **All class I** technical documentations and labeling will be made MDR compliant **updated before DOA**. MDR DoCs will be issued accordingly.

In case of reusable surgical instruments DOA cannot be issued until these devices are certified by the NB.

24

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**Thank you for your attention !**

