Medical Device Refurbishment
healthcare in a circular economy

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In the context of this presentation “Refurbishment of Used Medical Systems” is defined as:

“The process to restore used equipment or systems into a condition of safety and effectiveness comparable to when new. This includes actions such as repair, rework, update and replacement of worn parts with original parts. All actions are performed in a manner consistent with product specifications and service procedures defined by the manufacturer for that equipment or system without significantly changing the equipment’s or system’s performance, safety specifications and/or changing intended use as in its original registration”

• Similar terms with sometimes different regulatory implications are used around the world.

• DITTA focus is on the process as defined above, rather than on the term used to define it.
DITTA is the Global Diagnostic Imaging, Healthcare IT, and Radiation Therapy Trade Association.
Healthcare is evolving. Dramatically.
We’re getting older and sicker
An increasing population in the developed world is projected to be chronically ill.
The world population grows and ages

World population by age group, 1950-2050

Europe population by age groups, 1950-2050

We don’t take good care of ourselves

Obesity, heart disease and cancer are global health issues that are worsened by the way we live.
Demand for care is growing

There are simply not enough nurses and doctors to cope with our growing (and aging) population. Rising healthcare costs are unsustainable.
The rate of change is accelerating

New product innovation introduces both complexity and promise. We need another kind of innovation as well, one that is financially sustainable.
Healthcare, the world’s largest service sector

Worldwide Healthcare Expenditure
>US$ 6,300 bln in 2011

Worldwide Healthcare Expenditure grows to >US$ 10,000 bln in 2018 (estimate)

Source: Frost & Sullivan, Dec 2011, OECD Health Data 2012
Our global economy is evolving as well. Exponentially.
BUT IS IT SUSTAINABLE?

Temperature

Population

CO2

Ozone depletion

1800 1900 2000
ECONOMIC DEVELOPMENT COUPLED TO NEGATIVE ECOLOGICAL IMPACT

Source: WWF Living Planet Report 2013

Human Developments Index
(life expectancy + education level + purchasing power)

Ecological Footprint
(global hectares per person)

North America
Europe
Other Europe
Latin America
Middle East/Central Asia
Asia-Pacific
Africa

Low Human Development
Medium Human Development
High Human Development
Very High Human Development

World average biocapacity per person in 2008
COMMODITY PRICES GOING UP FAST
SEPTEMBER 2010: THE ELLEN MACARTHUR FOUNDATION IS LAUNCHED
THE CIRCULAR ECONOMY 100 - PLATFORM OF LEADING COMPANIES
A circular economy aims to decouple economic growth from the use of natural resources by using those resources more effectively.

For a sustainable world, the transition form a linear to a circular economy is a necessary boundary condition.

Product refurbishment, improving reusability and new business models away from product ownership, will help us in the right direction.
So how does this affect healthcare and our industry?
LOOPS AND ENABLERS OF A CIRCULAR ECONOMY FOR MEDICAL DEVICES*

* Specifically capital goods like medical imaging machines. Not referring to single use medical devices.
Economy solution

✓ Typically 70-80% of new price

High Performance

✓ Previous or current generation products

Risk Free Investment

✓ Same as new warranty
✓ Service back-up
APPLIES TO DIFFERENT TYPES OF MEDICAL IMAGING EQUIPMENT
GLOBAL MARKET FOR PRE-OWNED MEDICAL IMAGING EQUIPMENT

Sales regions

- US 49%
- LATAM 16%
- APAC 10%
- EMEA 25%

Modalities

- CT 29%
- MR 22%
- US 15%
- X-ray 19%
- AMI 15%

Total market ~ €1.3 Billion
Historical growth rate ~ 6-8%
GLOBAL DIAGNOSTIC IMAGING INDUSTRIES AGREED ON A JOINT POSITION IN REFURBISHMENT

TO GUARANTEE EQUIPMENT SAFETY AND EFFECTIVENESS
HARMONIZATION IS CRUCIALLY IMPORTANT

Initiatives like this are critical to enable the required flow of goods, needed to provide sustainable access to safe and effective refurbished equipment and affordable healthcare.
CONCLUSIONS

Medical Device refurbishment:

• Is a globally growing concept
• Offers economic solutions to help control cost in healthcare
• Makes sense to more and more healthcare providers
• Enhances access to care and contributes to a sustainable future
• Deserves an internationally harmonized approach
Thank you