EUKA
enabling the drone industry

Wireless Community
an imec initiative

FLANDERS MAKE
MANUFACTURING INNOVATION NETWORK

CONTROL OF MOBILE UNITS IN INDUSTRIAL ENVIRONMENTS

introduction at 13h30

Kris Hermus Innovation program manager Flanders, imec
Founder & Coordinator Wireless Community

Eli De Poorter Professor, imec-IDLab-UGent
Coordinator Smart Connectivity IN4.0 Proeftuin

AGENTSCHAP INNOVEREN & ONDERNEMEN

VLAANDEREN INDUSTRIE 4.0

WIRELESS COMMUNITY

WIRELESS COMMUNITY

Wireless Community
an imec initiative

- technology community
- workshops on innovations in wireless technology

- stimulate innovation in Flanders
- facilitate R&D collaborations
- by sharing knowledge between local academia and industry

- Founded in 2009 by imec

INDUSTRY: 55 LOCAL COMPANIES

imec

NEW MEMBER

Methods 2 Business

- semiconductor company
- building IP products for WiFi connectivity
- one of the first suppliers of Wi-Fi HaLow™
- contributing member of Wi-Fi Alliance®
- founded in 2010, headquartered in Eindhoven

www.methods2business.com

imec

ACADEMIA

ARTESIS PLANTIJN
HOGESCHOOL ANTWERPEN

erasmus
HOGESCHOOL BRUSSEL

FLANDERS
MAKE
MANUFACTURING INNOVATION NETWORK

howest
De Hogeschool West-Vlaanderen
Lid van de Associatie Universiteit Gent

imec

KAHO

KdG
Karel de Grote
Hogeschool

KATHOLIEKE UNIVERSITEIT
LEUVEN

TU/e

PXL

UC Leuven Limburg
MOVING MINDS

Universiteit
Antwerpen

UNIVERSITEIT
GENT

ULB

VUB
VRIJE
UNIVERSITEIT
BRUSSEL

INNOVATION ORGANIZATIONS

	Non-Members	Members
Annual fee	-	Companies: 300 EUR Academia: free
Access to workshop	80 ~ 100 EUR per person per workshop	Included (up to 10 employees per workshop)
Access to slides	attended workshop only	all slides of all workshops
Technological advice Partner search	-	Yes
Presentation	-	Yes*
Demo-booth	-	Yes*
Visibility	-	on website + flyer

*depending on availability and in line with topic of the workshops

imec

VLAIO PROEFTUIN PROJECTS

DEMONSTRATION DRIVEN INDUSTRY 4.0 INNOVATION

AGENTSCHAP INNOVEREN & ONDERNEMEN
Vlaanderen is ondernemen
VLAANDEREN INDUSTRIE 4.0

EERSTE REEKS PROEFTUINEN (2018-2021)

Budget: 3,5 miljoen euro

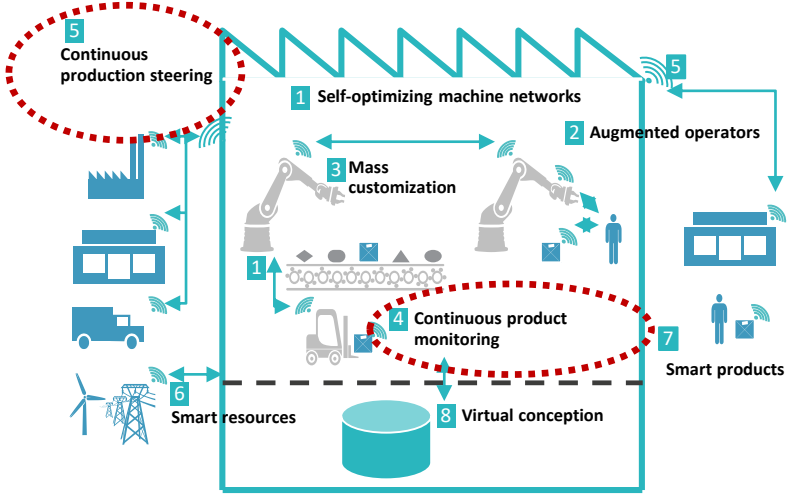
- Living lab agrifood 4.0
- Smart maintenance
- Predictive maintenance & Industrial Data Space
- **Smart connectivity**
- Digitale servitisatie
- Operator ondersteuning
- Smart factories: collaboratieve werkcel 4.0

www.vlaio.be/industrie40

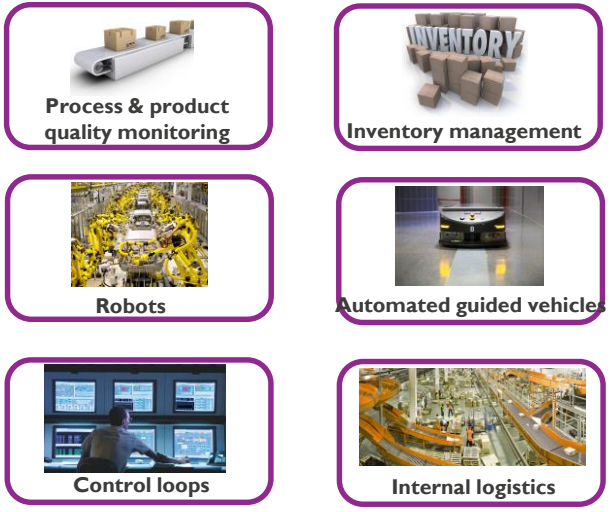
eli.depoorter@imec.be

VLAIO LIVING LAB: SMART CONNECTIVITY

Industry 4.0 requires interactions with (and trackability of) all products, machinery & personnel present in the production and distribution process.



Impact of continuous product steering on the operational processes



Example industry 4.0 use cases

eli.depoorter@imec.be

VLAIO LIVING LAB: SMART CONNECTIVITY

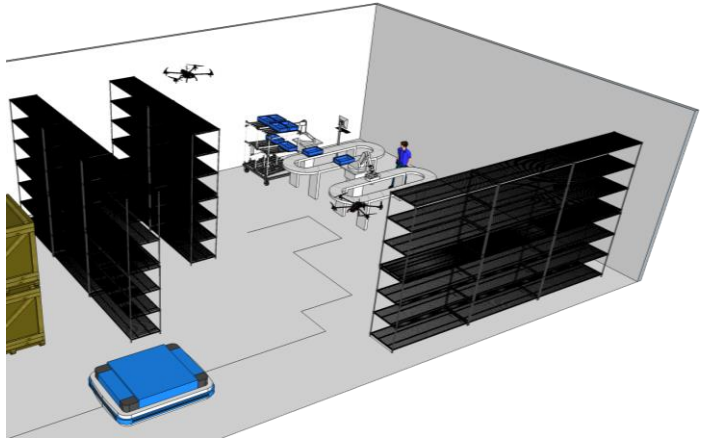
Industry 4.0 requires interactions with (and trackability of) all products, machinery & personnel present in the production and distribution process.

To this end, the living lab combines **ICT innovations** related to

- *Continuous wireless connectivity* with static and mobile items
- *Location awareness* of goods, objects & personnel
- *Video based object recognition*

Offering:

- Demonstration rooms (Ghent & Leuven)
- Local technology demonstrators (in-situ set-up in realistic conditions)
- Masterclasses (in-depth technology discussions)
- Feasibility studies (valorization & technology)
- Consultancy (design of custom solutions)
- Business plans & valorization studies



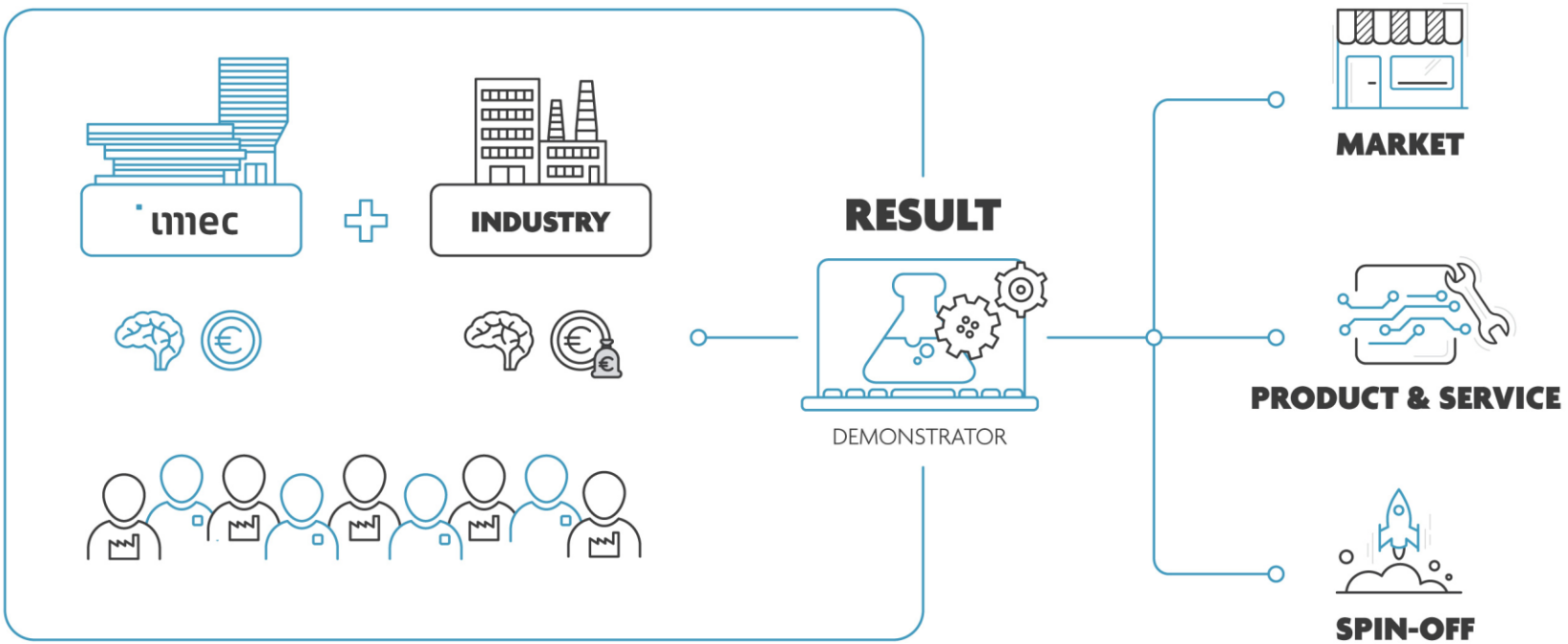
Demonstration room: autonomous drone for warehouse inventory management and production inspection

IMEC.ICON

COLLABORATIVE RESEARCH PROJECTS

INTERDISCIPLINARY COOPERATIVE RESEARCH

VALORIZATION

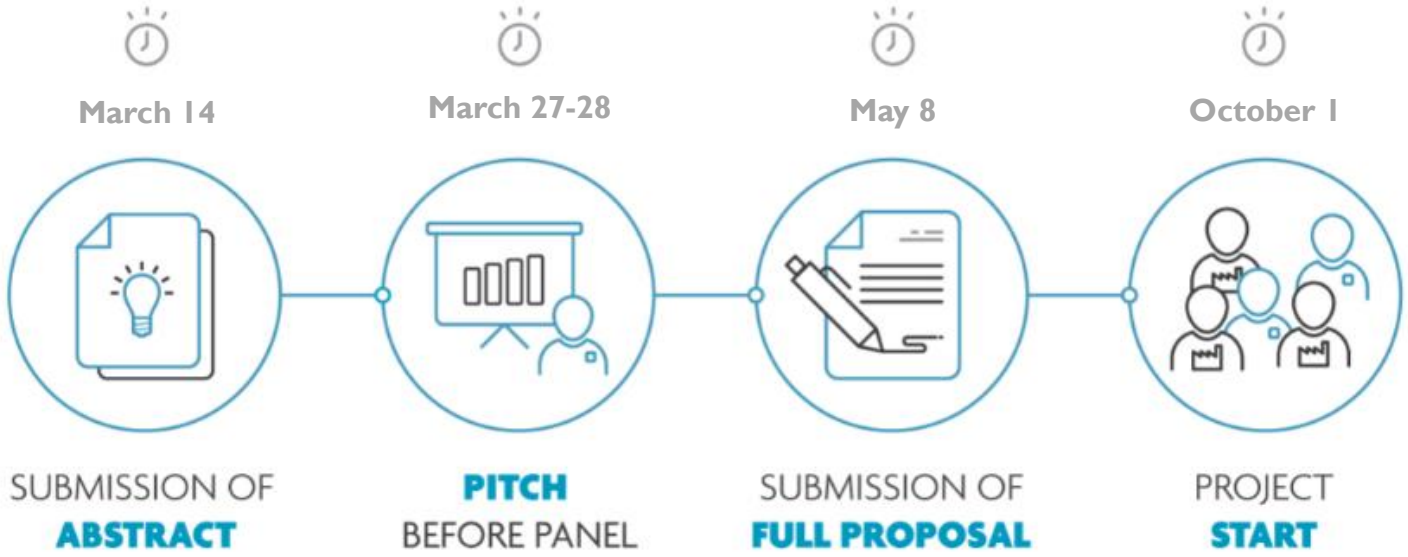


https://www.imec-int.com/en/icon

icon@imec.be

IMEC.ICON CALL 2018-2

TIMING AND SUBMISSIONS



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PROGRAMME FOR TODAY

4 TRACKS: ACADEMIC TUTORIALS AND COMPANY TESTIMONIALS

AUDITORIUM

- **Track 1** **Accurate localization**

imec UNIVERSITEIT GENT OCTINION Engineering the future

- **Track 2** **Path finding**

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- **Track 3** **Wireless connectivity**

imec UNIVERSITEIT GENT DRONEMATRIX OPERATING DRONESOLUTIONS

- **Track 4** **Object recognition**

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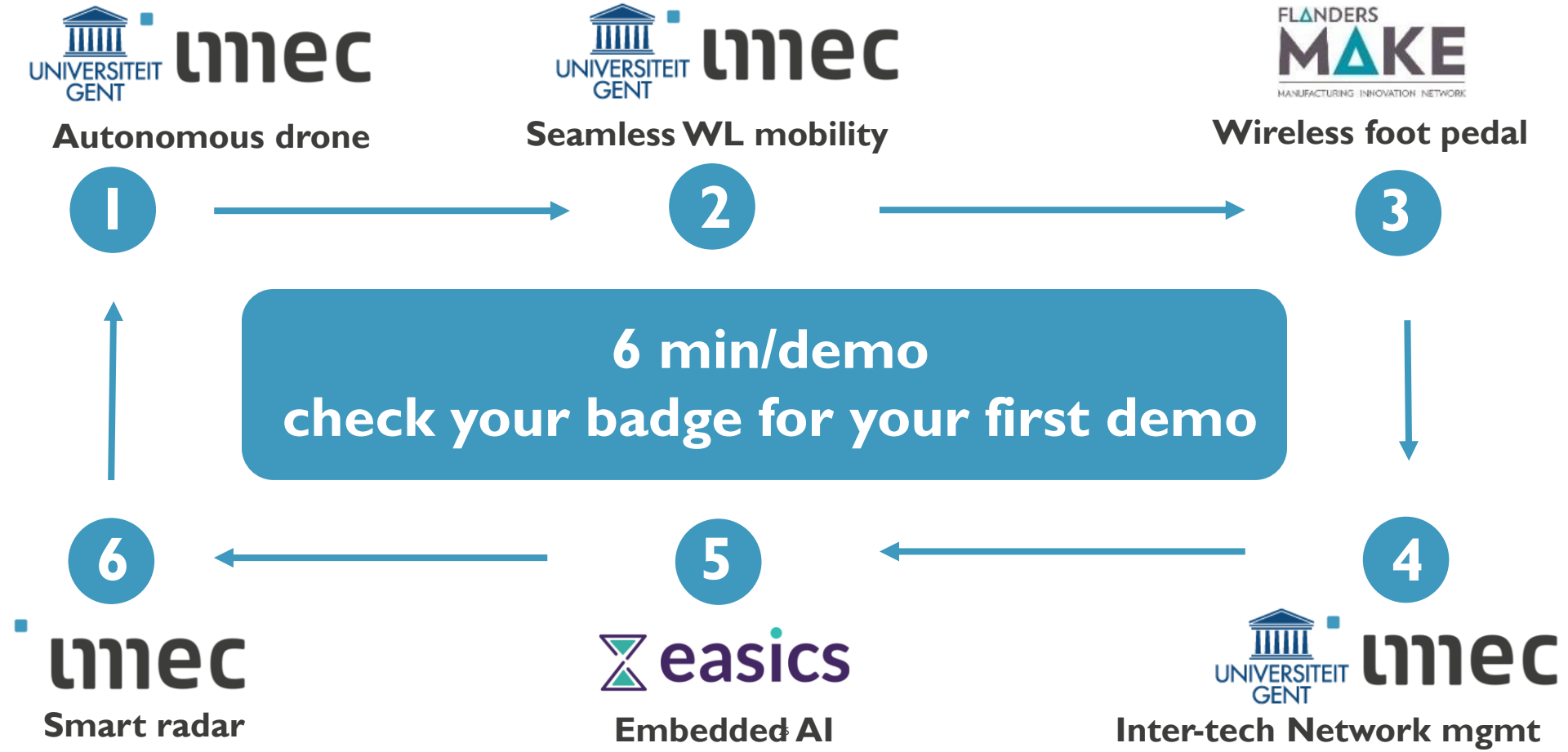
GUIDED DEMO TOUR



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www.wirelesscommunity.be

embracing a better life

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