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Industrial Impact from Combined Materials Expertise

# Pilot Line ecosystems and the importance of creating value chains

Dr. Ann O'Connell, Advanced Materials  
Ireland Co-Ordinator

Host

Co-Host



NMBP Workshop-8th March San Sebastian Spain

# Today – March 8<sup>th</sup>

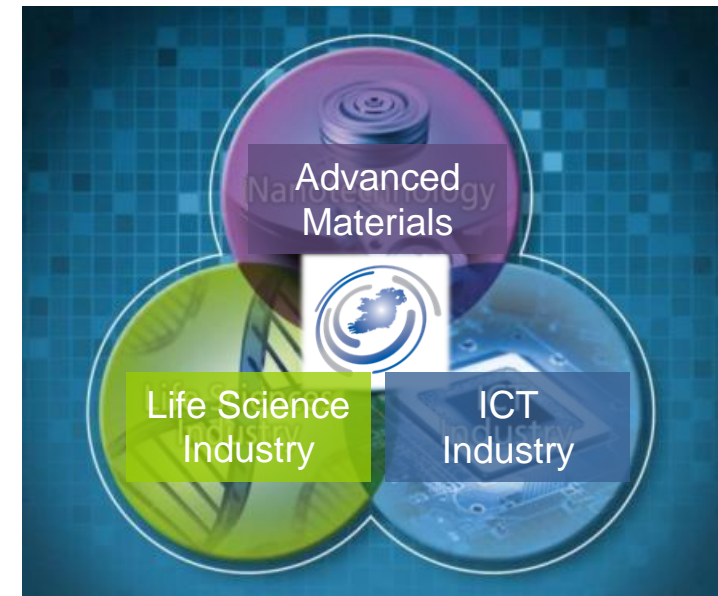
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The day when women are recognised for their achievements without regard to division, whether national, ethnic, linguistic, cultural, economic or political.

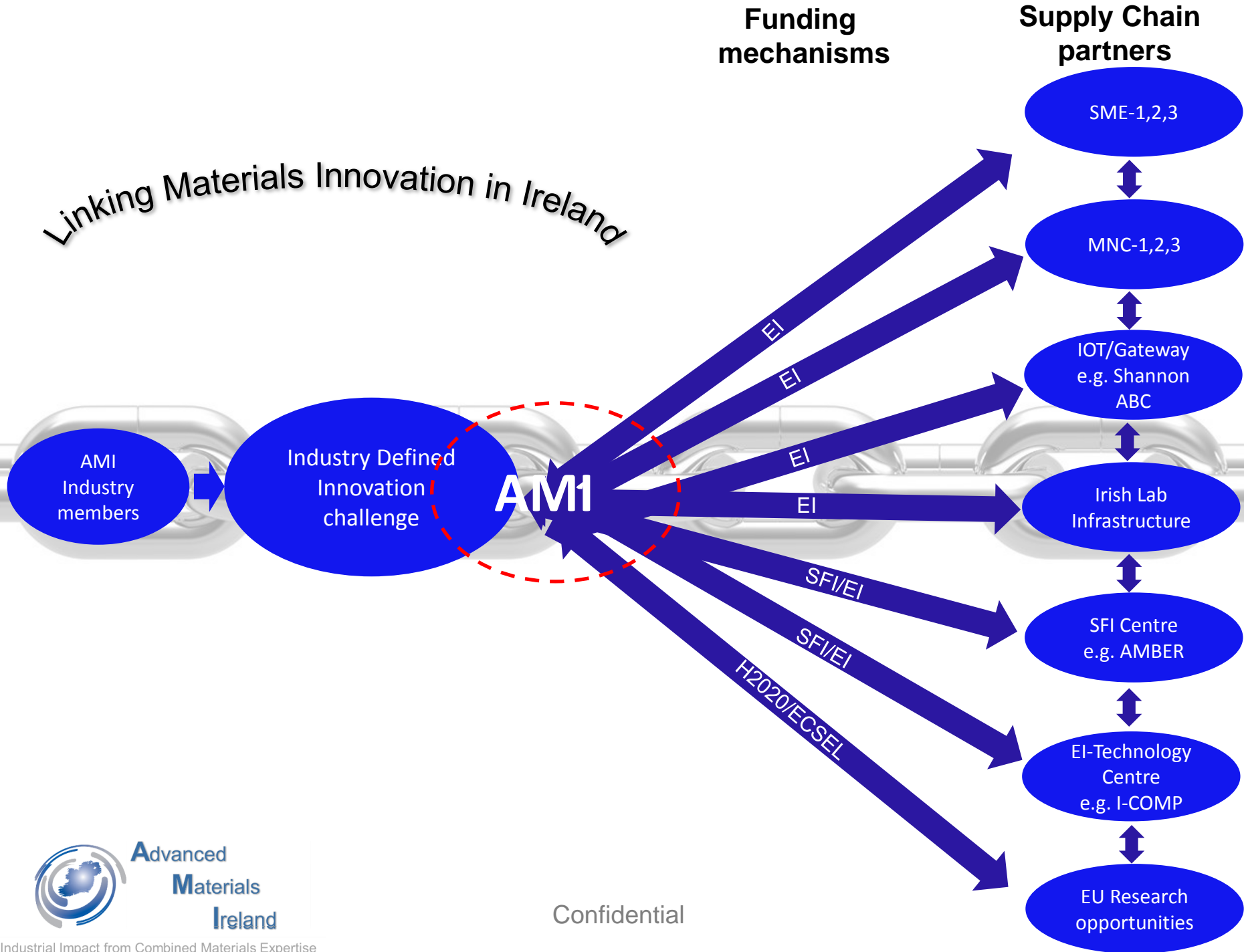
# The Advanced Materials Ireland Model – Easier Collaboration via Supply Chain Partnerships



**Advanced  
Materials-enabled  
products &  
solutions**



# Linking Materials Innovation in Ireland

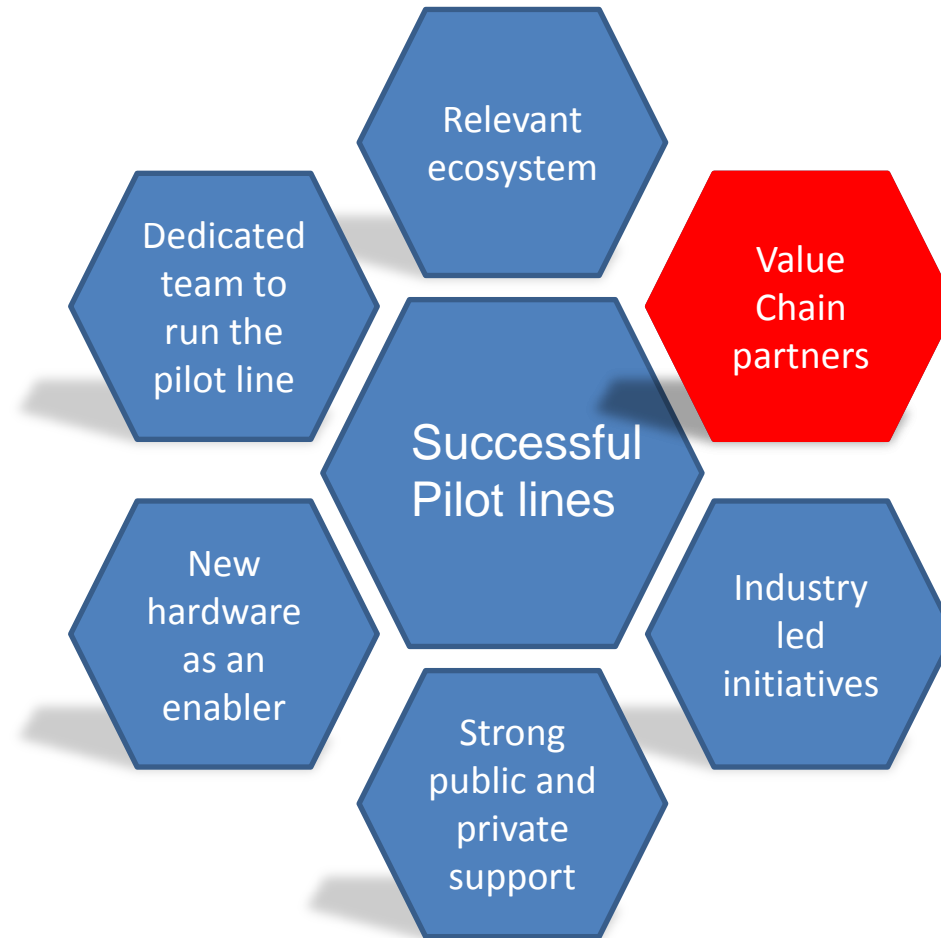


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# Key components of a successful Pilot Line



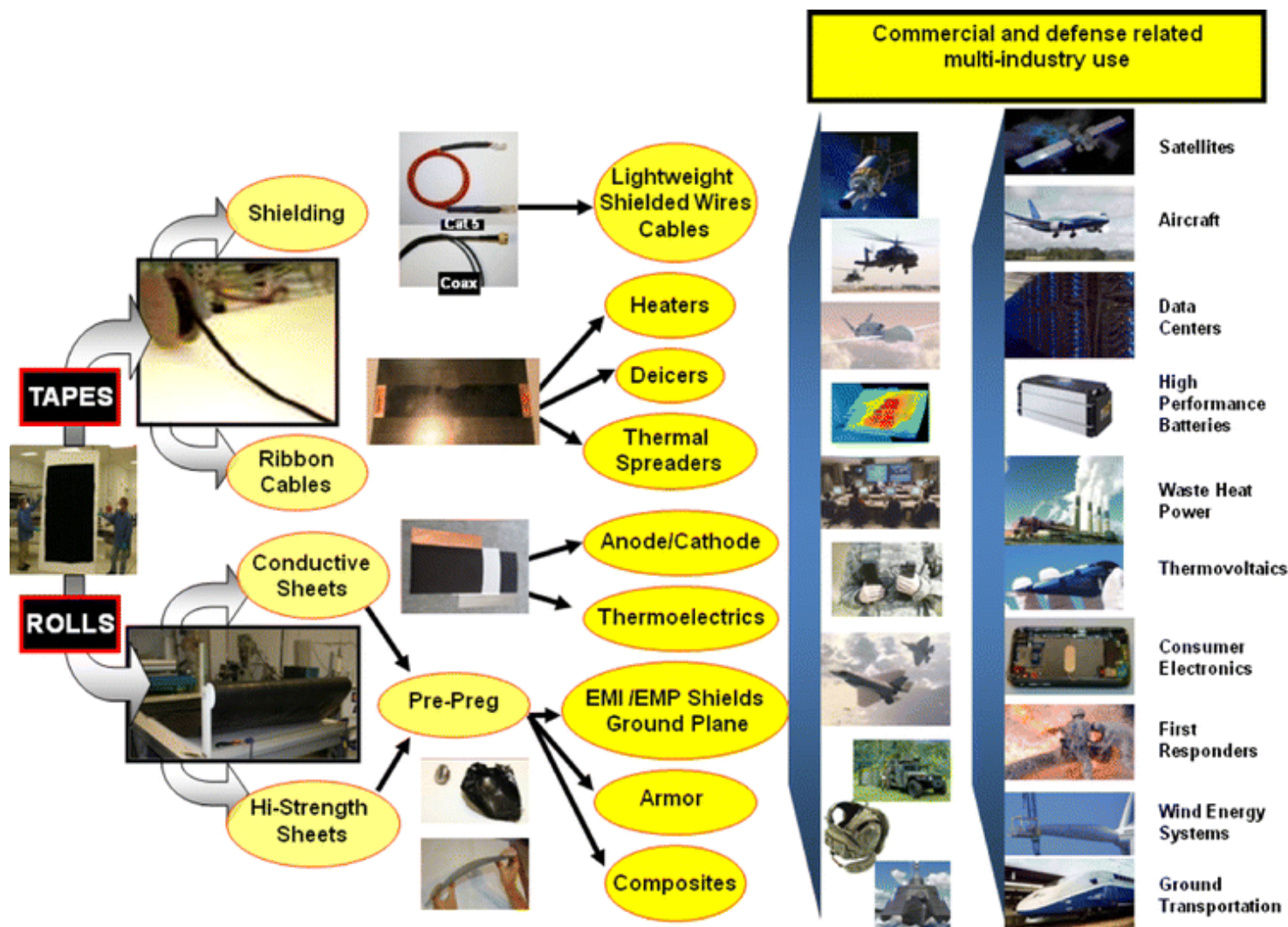
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## AMAT learnings for:

# “Nobody is the best at everything”

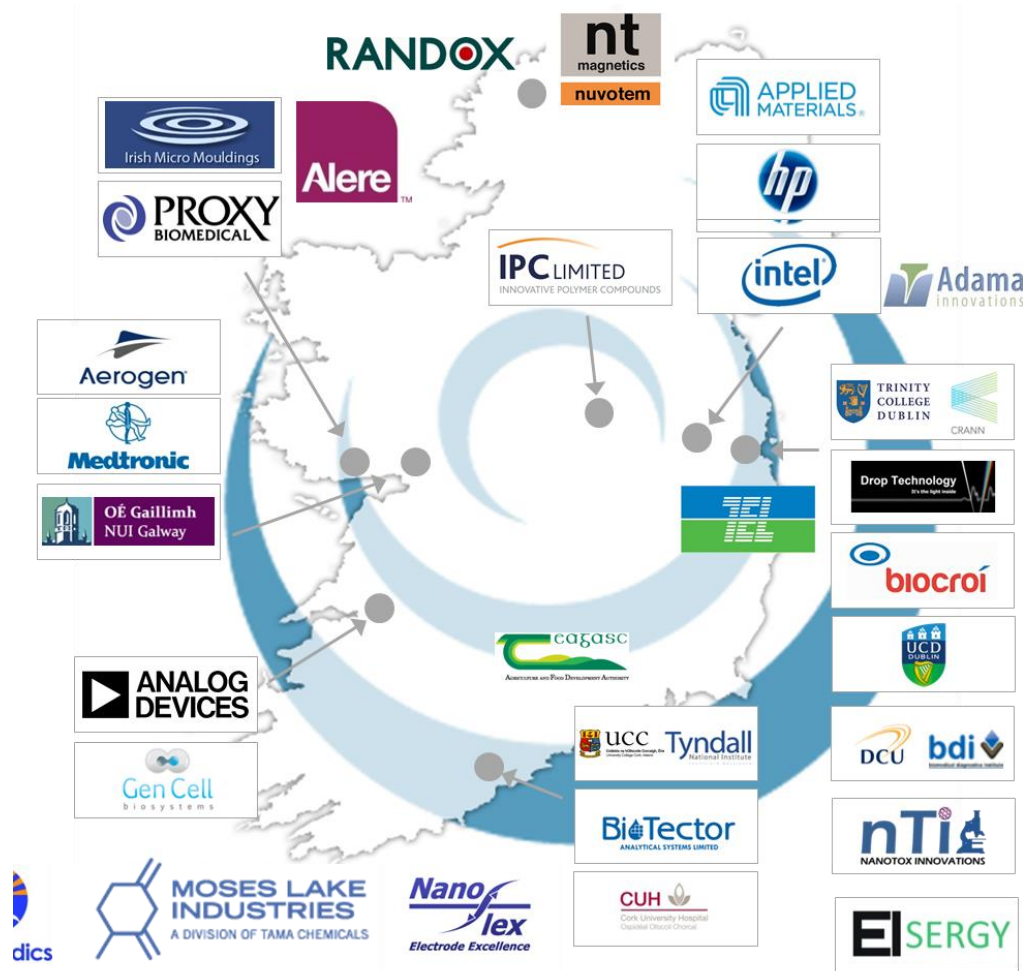
carbon nanotube-based cables and sheets in



Source: Roco, M.C., *The long view of nanotechnology development: the National Nanotechnology Initiative at 10 years.*

Journal of Nanoparticle Research, 2011. 13(2): p. 427-445.

# AMI – Irish membership – Value chain partners



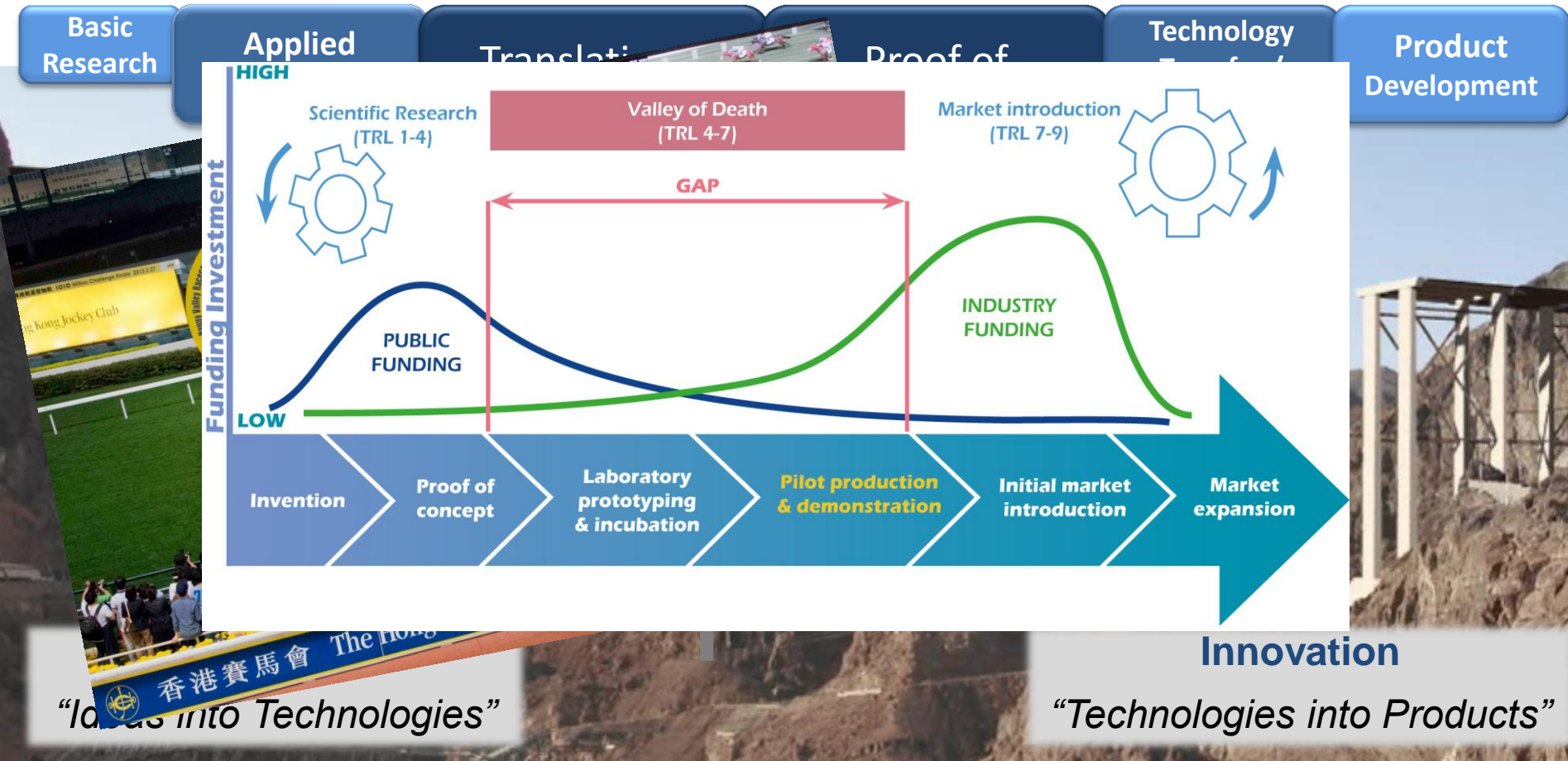
(22 companies,  
6 institutes)



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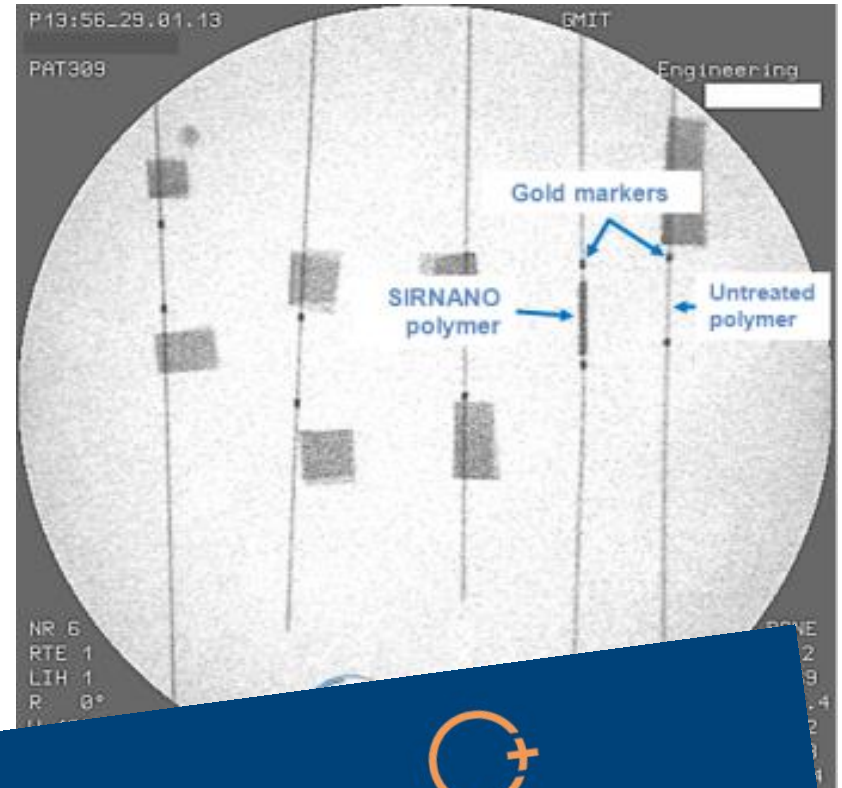
# Industry view – Translational Technology Development



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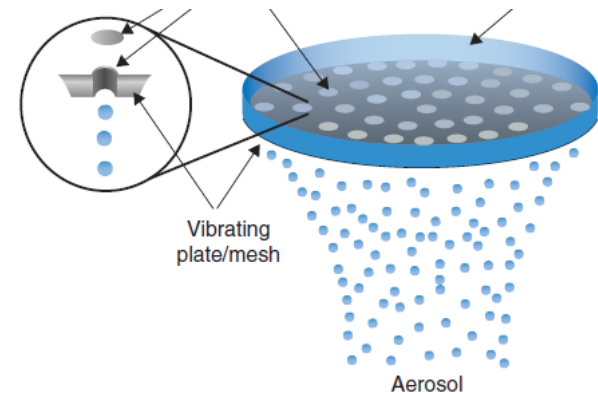
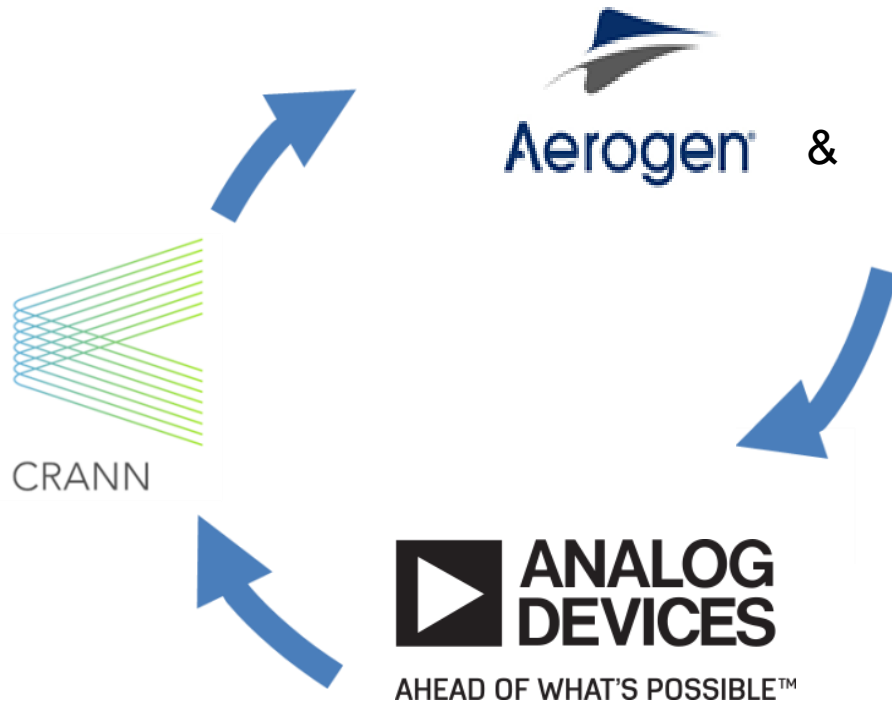


# SIRNANO – radiopaque polymers for catheters



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# INHALE – Piezoelectric MEMS based nebuliser technologies



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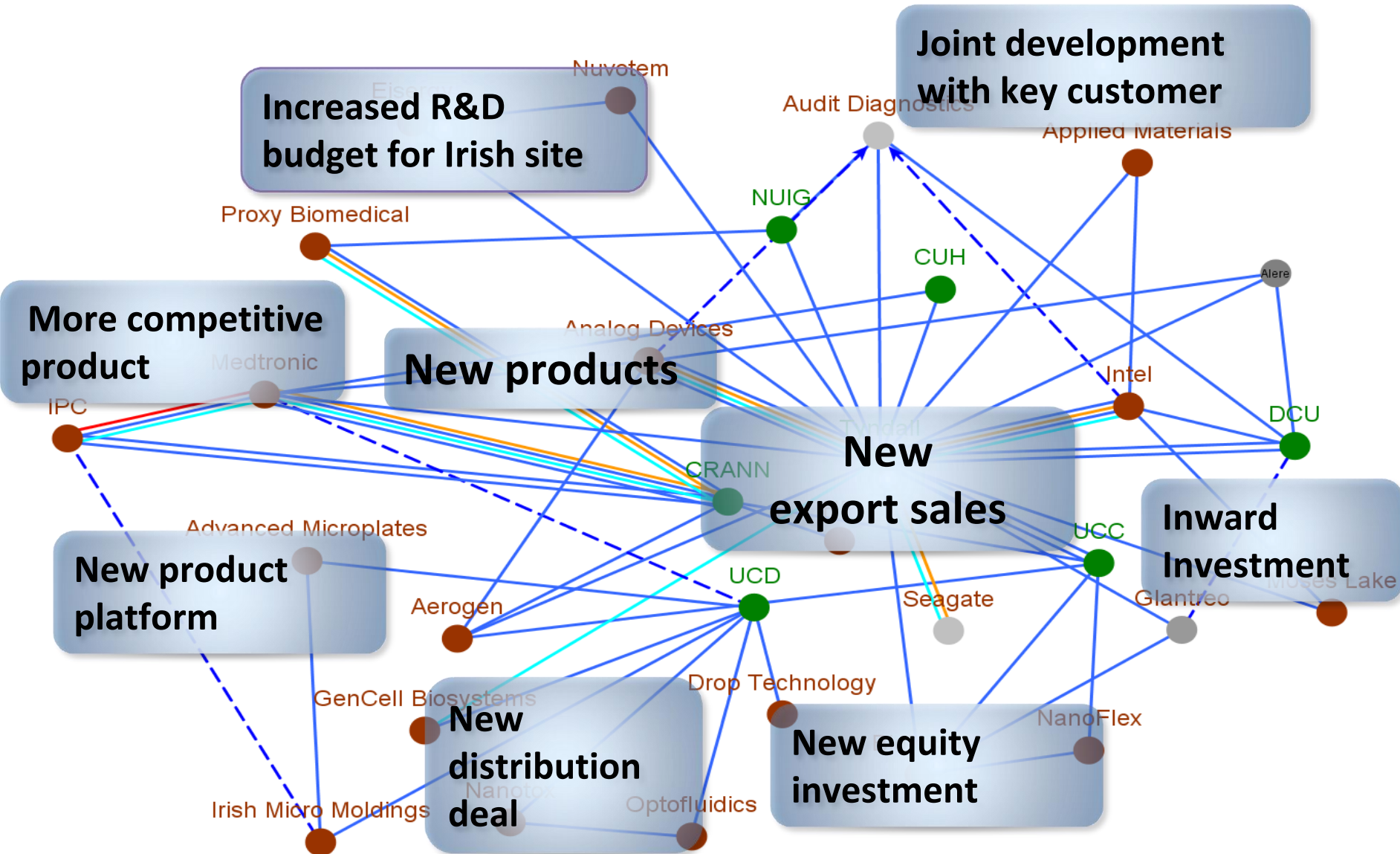
# Current innovation projects

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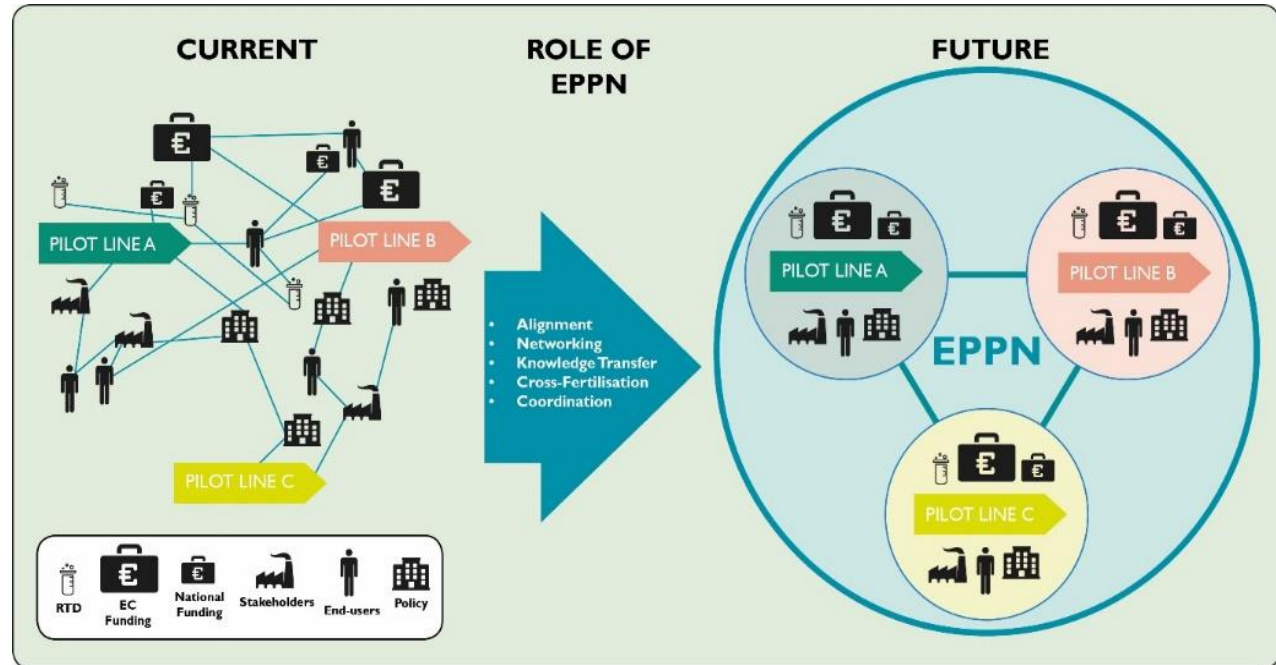
## AMI Industry member current requirements:

- Sterilisation of Medical Device product – Multi faceted from materials to sterilisation processes.
- Electroactive polymers – not as an actuator but as the body of the materials – An example is Nitinol but not what the industry want

# Creating the value chain ecosystem



# EPPN the link in the chain- supporting the impact of pilot lines



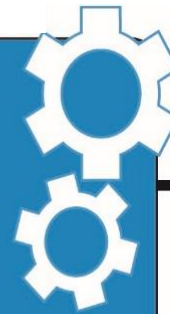
## Current Situation

### Pilot Line sector in Europe

- High number of Pilot Lines
- Numerous fragmented value chains
- Increasing cross sectoral challenges:
  - To build a 'Single Market for Innovation'
  - Industry access to research expertise
  - Ensuring quality of services offered
  - Maximising investments

## EPPN link

- Networking
- Mapping
- Best practice
- Barrier identification
- Alignment
- Coordination
- Sustainable business planning



## Expected Impacts

- Improved coordination of initiatives
- Identification of synergies and alignment of efforts
- Optimisation of value chains and ecosystems
- Increased EU competitiveness in strategic sectors
- Increased innovation capacity and outputs



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# Formation of a Pilot Line Ecosystem

- **Build new connections and inform.** Build the Network , Meeting people and establish links between industry members, pilot line host institution, business hubs and funding agencies e +
- **Establish channels between possible partners.** establish links between industry members and pilot line – Host events
- **Partner with others.** Constantly establish new links with partners with a view to A “smart brokerage” approach is whereby broker possesses technical domain knowledge (Pilot line capabilities), Industry investment is scaled v reducing risk. All stakeholders in the system need to collaborate and take a long term view
- **Foster sustained activity.** Pull together the correct supply chain for the proposal in question. Fund Feasibility studies,1 IP agreement Provide next step funding options





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**Thank you  
Any Questions?**

Host



Co-Host

