

ECG Spring Congress

Challenges and (technological) trends in the logistics sector

Fernando Liesa Secretary General, ALICE

Madrid, 25th May 2018



Why and what is ALICE?

Focus on Medium-Long term vision for logistics:

Trends, New Business models... \rightarrow New Challenges and Opportunities

Define a Research & Innovation Strategy/agenda linked to Industry interest

→ Formal mandate of the European Commission in defining R&I Programs H2020 as European Technology Platform*

Mapping and analysis progress: R&I projects, Industry initiatives, Start-ups \rightarrow Facilitate access to knowledge generated

Create an open Network for Collaborative Logistics Innovation in Europe → Building knowledge and supporting innovation



* What are the European Technology Platforms, what do they do and what is the European Commission Role

Activities performed partially in the frame of WINN, SETRIS & SENSE Projects. WINN, SETRIS & SENSE projects have received funding from the European Union's FP7 and Horizon 2020 research and innovation Programme under grant agreements No. 314743, No. 653739 and No. 769967





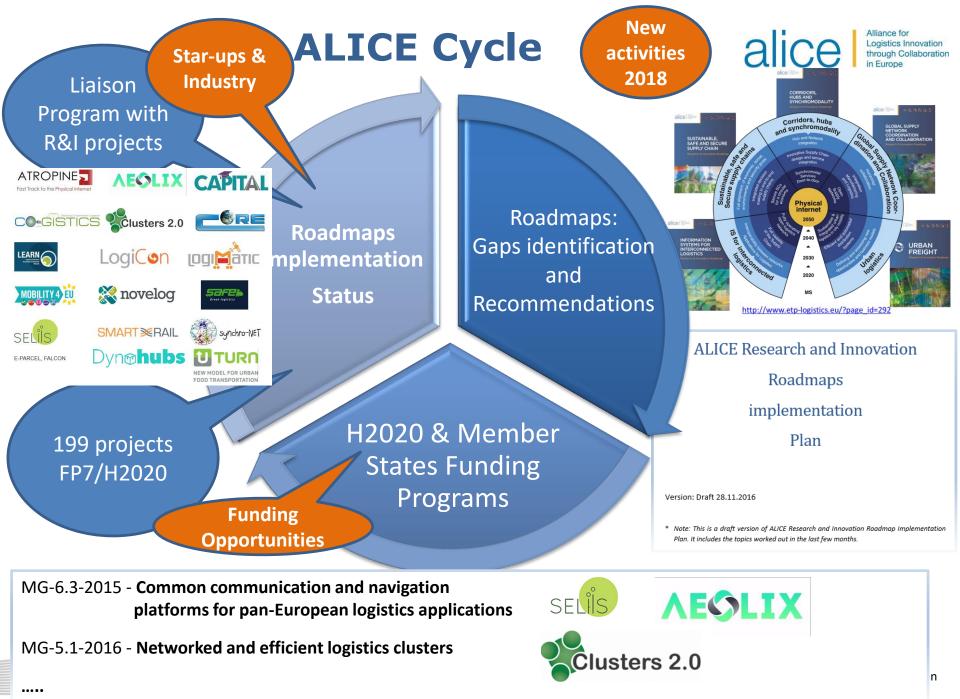
Alliance for Logistics Innovation through Collaboration

ALICE membership per type of organization

| Type of Organization | Members | EU/International Associations |
|--|--|---|
| Shippers & Retail | PEG L'ORÉAL 5 SOLVAY | ESC ELUPEG |
| Logistics Service Providers, Courier and Postal operators & Freight Forwarders | Construction Monoration Posteitaliane LINEAS GEODIS Monoration Kaleido | |
| Ports, Hubs, Intermodal terminals & Transport Infrastructure | Image: Second | The faderation of European Private Part Operations and Terminuk |
| Vehicle Manufacturers & Logistics operations, handling (modular units) | | |
| Information and Communication Technologies & Consultancy | Image: Second and the second and th | ERTICO ITT TUROT |
| Regional & National Logistics Clusters & Associations | VIL VEREIN NET ZVEREN NET ZV | SMART FREIGHT |
| Research and technology Centers | | |
| European Technology Platforms /PPPs | | |
| Member States and innovation Funding* | Window Processor <th< td=""><td></td></th<> | |

* Involved in ALICE Mirror Group

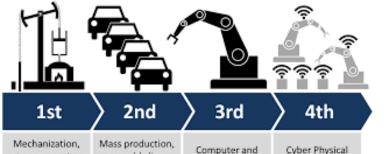




Commission

Industry 4.0, e-commerce, digitalization and decarbonization





Mechanization, water power, steam power

European

Commission

PARIS2015

COP21.CMP11

assembly line, automatic electricity Computer a

computer and Cy automation

yber Physical Systems

INDUSTRIAL

XX

STEAM ENGINE ELECTRICITY TELECOM

*Fuente: Pablo Gomez (FM Logistic and ALICE Vice-chair) 2016

XVII

Jetta From \$17,895

different (r)evolutions

1990

2000

In the crossroads of

Passat From \$22,440 CC From \$3

Build Your Own

From \$34,475

3000 bc

BIG DATA

Networking

Griding

Automatization

Neuroscience

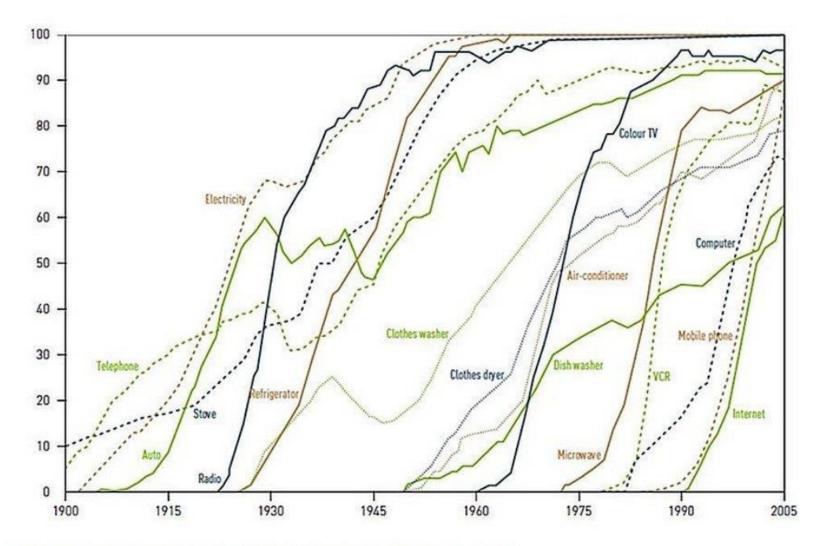
Robots

Drons

INFORMATION

Beetle From \$20,220

The pace of Technological Change is Accelerating



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Alliance for

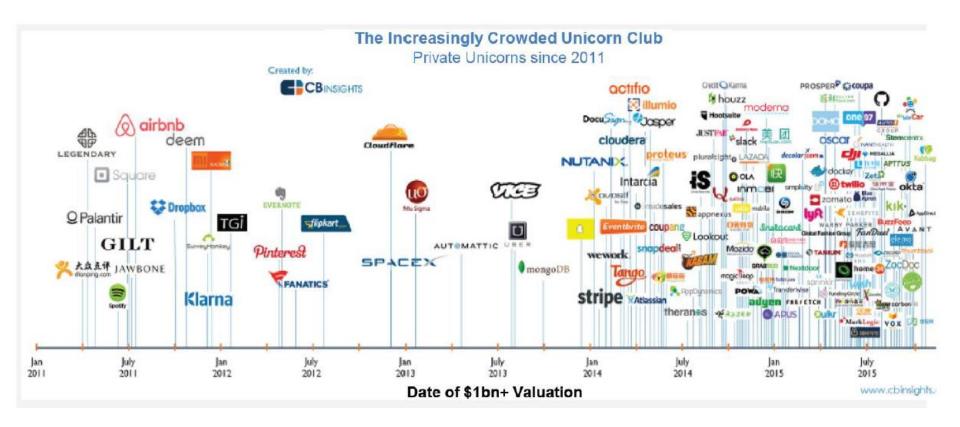
Logistics Innovation through Collaboration

Technology adoption curves for a range of modern innovations. Victorian Government

Source: Rod Franklin, EC & ALICE Final Logistics Cloud Event: http://collaborativeinnovationdays.eu/



This can be seen in the explosion of "Unicorn" startups focussed on digital technologies

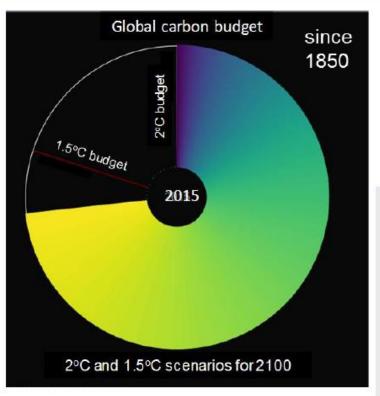


Source: Rod Franklin, EC & ALICE Final Logistics Cloud Event: http://collaborativeinnovationdays.eu/





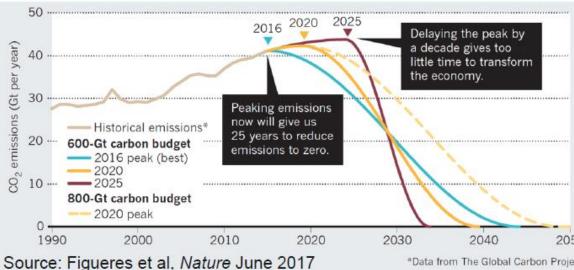
International agreement to keep average global temperature '*well below*' 2°C above preindustrial times and '*endeavor to limit*' them to 1.5°C



At present rate of greenhouse gas emissions: (to have 66% chance of staying within limit)

9 years to stay with 1.5°C limit 19 years to stay with 2.0°C limit

Source: Anderson (2015)



Source: Ed Hawkins

http://www.climatechangenews.com/2016/07/ 27/spiral-tastic-climate-change-in-threeanimations Source: Alar

Source: Alan McKinnon, EC & ALICE Final Logistics Cloud Event: <u>http://collaborativeinnovationdays.eu/</u>

Industry 4.0 & e-commerce

(oem) Even faster, more agile, responsive, distributor/ retailer cost efficient and flexible SC! reseller Less intermediaries? custome supplie ogistics Großhandel Fuente: Apotheke https://courses.lumenlearning.com/boundlessbusiness/chapter/controlling-the-supply-chain/ Hilfsstoffe für die Produktion Customer Centric SCs Lager + Versand Baver Vita Produktion Großhandel Apotheke Wirkstoff + Medikament *Reduced time to consumer?* Potient Beipackzettel Werbematerial

Patienteninformationen

Fuente: Bayer Health Care





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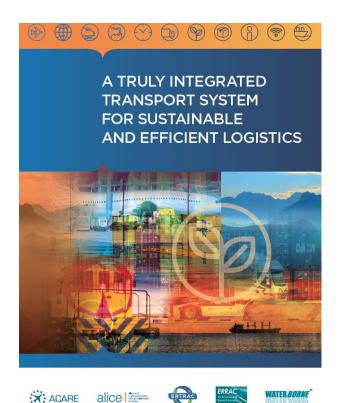
manufacturer

Logistics Innovation through Collaboration

Truly Integrated Transport System:

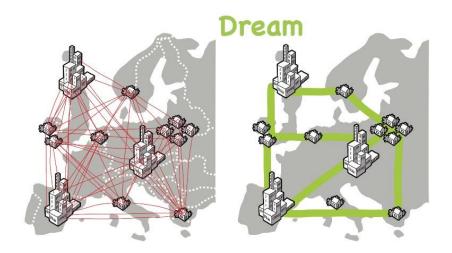
Alliance for Logistics Innovation through Collaboration in Europe

more efficient = more green



Report: http://www.etp-logistics.eu/?p=1298







Investment in Research and Innovation on logistics: alice

Alliance for Logistics Innovation through Collaboration in Europe

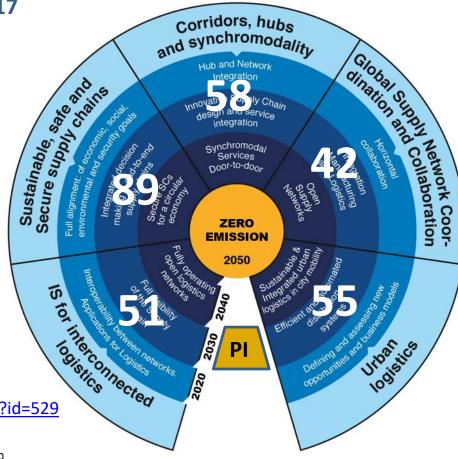
199 projects and initiatives (*Mainly EU research***)** have been identified as potentially contributing to ALICE Research and Innovation Roadmaps implementation.

The **investment** in these initiatives altogether has been **1000 Million** € with a public funding of **780 Million** € in the period **2010-2017**

Impact will be higher if funded projects will respond to an overall strategy!!!

We need a strategy ahead of (more) Money!!!

And we miss more (Logistics) industry involvement in the process



Report: http://intranet.etp-logistics.eu/mod/folder/view.php?id=529



Activities performed partially in the frame of WINN, SETRIS & SENSE Pro

Union's FP7 and Horizon 2020 research and innovation Programme under grant agreements IND. 514/45, IND. 55755 and IND. 705957





02 May 2018 | News

European Commission proposes €100B for research programme

Horizon Europe one of the few current EU budget lines to get increase in seven-year proposal

By Éanna Kelly



The European Commission on Wednesday outlined a €100 billion budget for its new research programme, running between 2021 and 2027. Source: https://sciencebusiness.net







So... who knows how the future of Supply Chains will be?

The Best Way To Predict The Future Is To Create It!

Source: President Abraham Lincoln

Thank you!



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