Alliance for
Internet of Things
Innovation

IoT Week • 5 June 2018

Agri-food digital innovation hubs – AIOTI perspective

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AIOTI WG06 at a glance

Mission: to become the **key meeting point** of EU-based stakeholders interested in the benefits of the **IoT** (tech, ecosystem, infrastructure) in the domains of farming for **food production** and **food safety**, **from farm to fork**, addressing the sectorial challenges

Diversity of members: ICT companies (large and small) consultancy services, research centers, and relevant members from demand side:

- Representatives of farmers and cooperatives, representatives of agriculture machinery, ...
- 2 of the largest ag-machine manufacturers (which are AIOTI founding members)
- ...

Membership

entities

- ■ Jan 2017 ■ Aug 2017
- ■ may-18
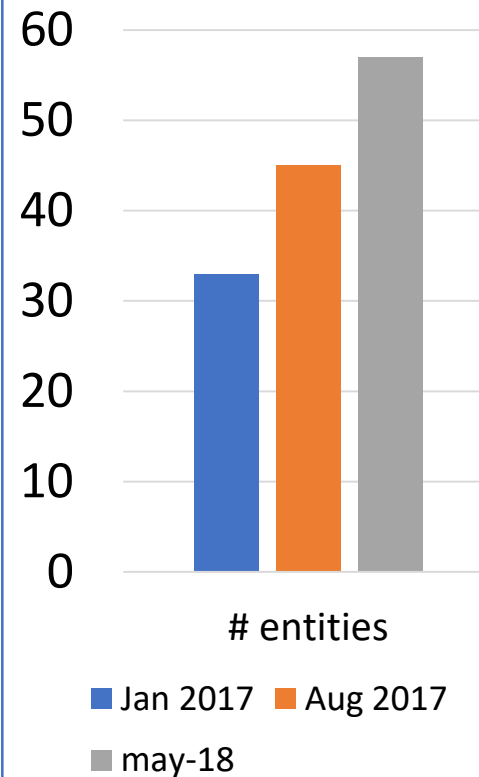
Scope:

- Farming domains: agriculture, livestock, aquaculture
- Technologies
- Policies
- Projects and pilots
- Farming & food ecosystems

Chair: **gradiant**

Co-chair: **JOHN DEERE**

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AIOTI WG06 position paper on agri-food DIHs

*"Agri-food DIHs must help the agrifood sector to **understand** the opportunities brought about by digital technologies to overcome the sectorial challenges, **facilitate the adoption** of those technologies and **make the best** from them in their practical application"*

Released in Nov 2017, "Digital Innovation Hubs for agriculture". Available for download at

https://aioti.eu/wp-content/uploads/2017/11/AIOTI_WG06_ADIHS_final.pdf

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The BIG question

**How to make agri-food
DIHs sustainable?**

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Recommendations

The paper proposes recommendations across several dimensions:

1. Technology
2. Brokerage and innovation
3. Access to funding
4. Entrepreneurship
5. Training
6. Inter-DIH cooperation
7. Sustainability
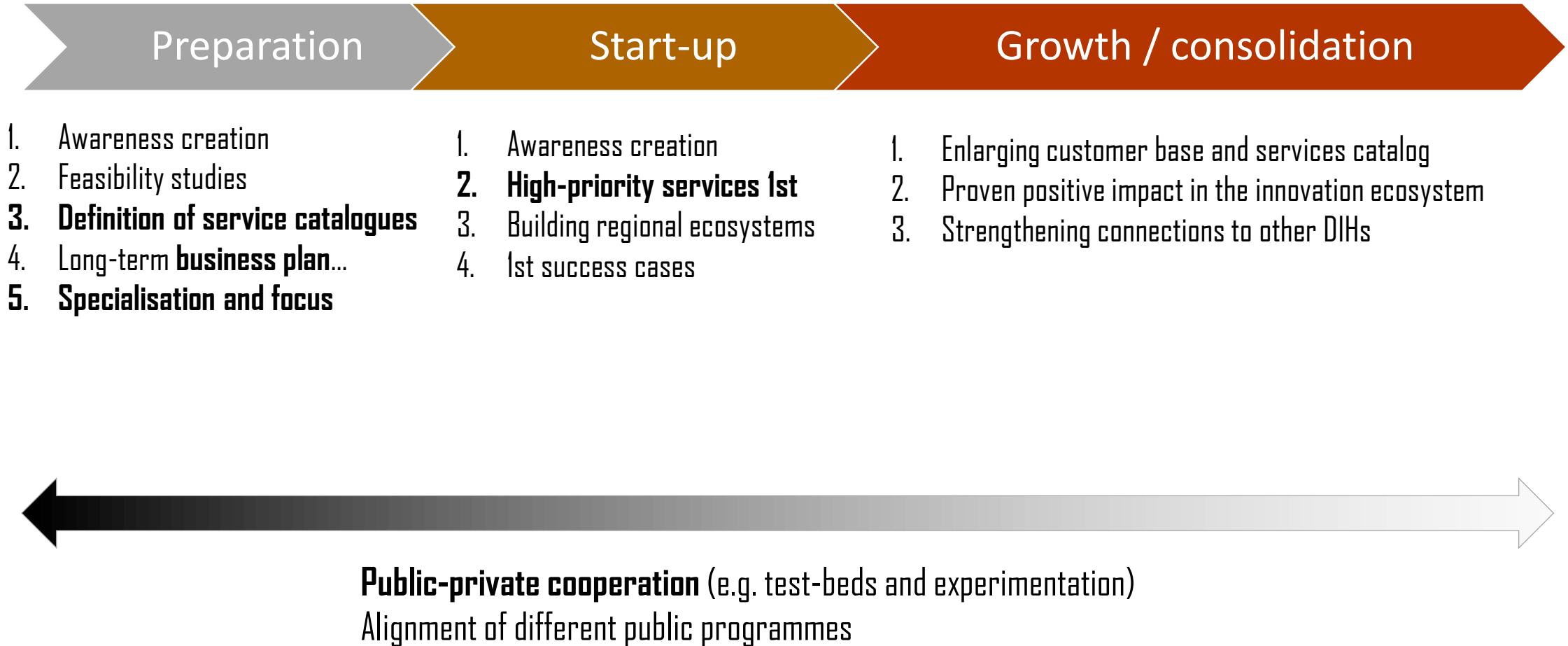
Specialise and focus (do not do "everything everywhere")

Involve key actors from the beginning:
- innovation brokers
- cooperatives / farmers associations
- RTOs

Gradual rollout

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Towards sustainable agri-food DIHs

Preparation	Start-up	Growth / consolidation

Preparation
1. Awareness creation
2. Feasibility studies
3. **Definition of service catalogues**
4. Long-term **business plan**...
5. **Specialisation and focus**

Start-up
1. Awareness creation
2. **High-priority services 1st**
3. Building regional ecosystems
4. 1st success cases

Growth / consolidation
1. Enlarging customer base and services catalog
2. Proven positive impact in the innovation ecosystem
3. Strengthening connections to other DIHs

Public-private cooperation (e.g. test-beds and experimentation)
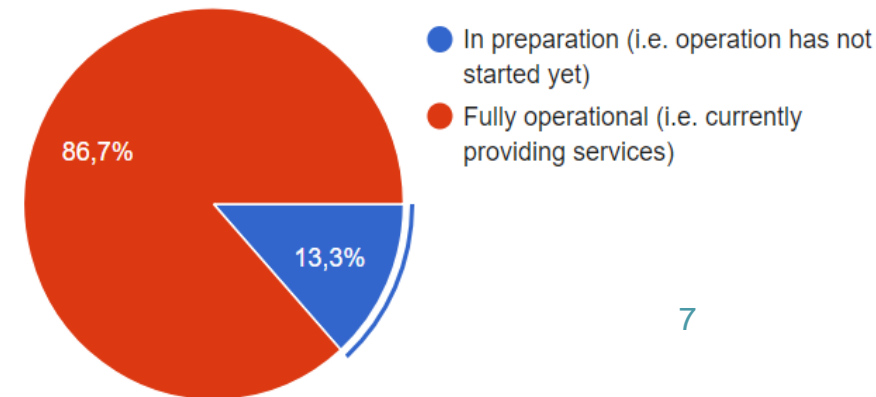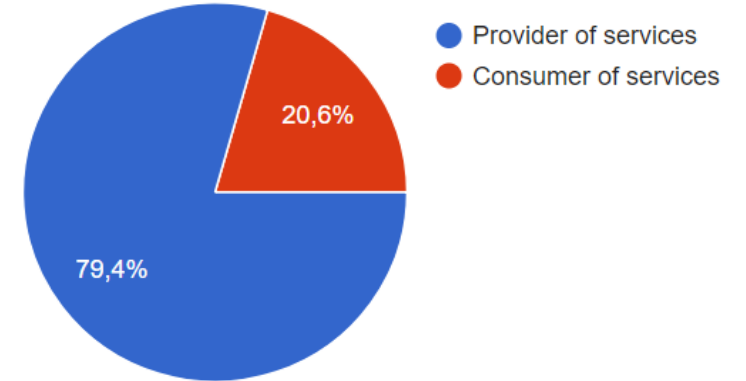Alignment of different public programmes

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AIOTI WG06 survey on business models

~**50** respondents so far (open until mid June)

https://docs.google.com/forms/d/e/1FAIpQLSd_jgM2n2wWMcACRYgIhnNoxl2UgIJP3G1sSKf-hLmexduIcA/viewform

🔵 Promoter or manager of a Digital Innovation Hub in the field of smart farming and/or food technologies

🔴 An entity/individual currently participating or interested in participating in an agri-food Digital Innovation Hub

🔵 Provider of services
🔴 Consumer of services

🔵 In preparation (i.e. operation has not started yet)
🔴 Fully operational (i.e. currently providing services)
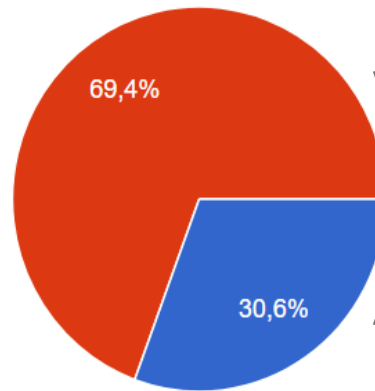
Funding sources of current agri-food DIHs

Funding source	Count (%)
H2020	7 (46,7 %)
ERDF or EAFDR	3 (20 %)
National R&D&i public funding	5 (33,3 %)
Regional R&D&i public funding	5 (33,3 %)
Other specific EU, national or regional funding	1 (6,7 %)
Private funding (payment per service)	6 (40 %)
Private funding (fees paid by DIH members)	3 (20 %)
Private funding (investment by DIH members)	1 (6,7 %)
Funded by telecom operator	1 (6,7 %)
Model not yet defined	1 (6,7 %)
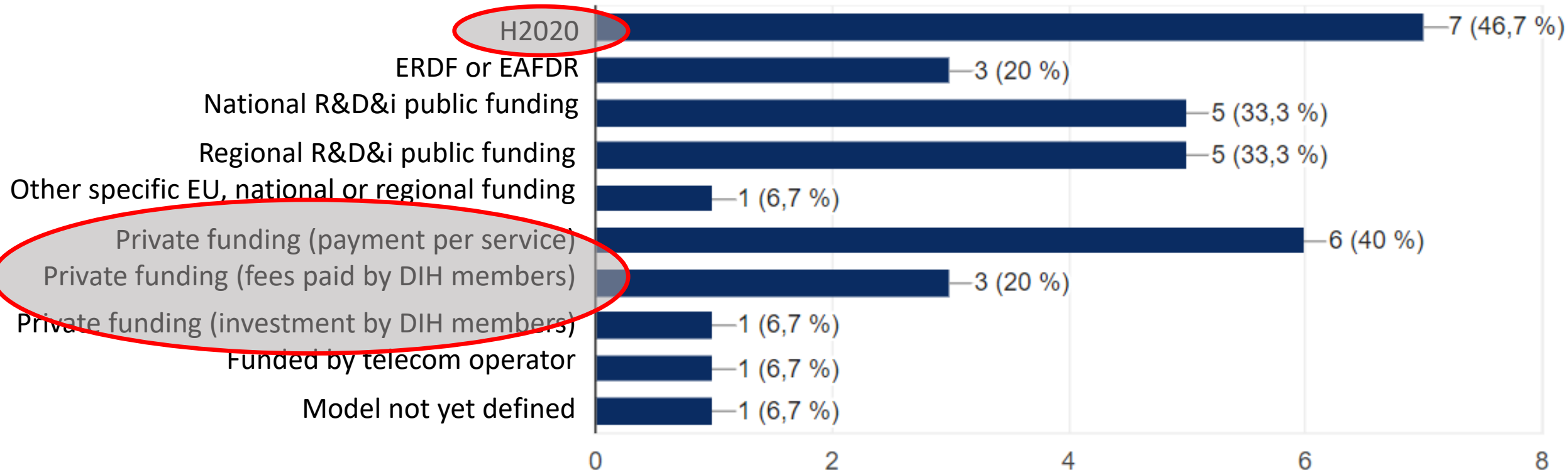
Catalog of services

WHAT DO DIGITAL INNOVATION HUBS DO?

	Service	Activities
Ecosystem	Community building	Scouting, brokerage, awareness creation, dissemination, ecosystem building
	Strategy development	Market intelligence, market assessments, roadmapping
	Ecosystem learning	Workshops, seminars to share knowledge and experience
	Lobbying	Representing interests during meetings & conferences, organizing (country) visits
Technology	Strategic RDI	Joint, pre-competitive R&D, co-funded research (programmatic)
	Contract research	Specific R&D, technology concept development, proof of concept, public procurement RDI
	Technical support on scale-up	Concept validation, prototyping, small series production
	Provision of technology infrastructure	Renting equipment, low rate commercial production, offering platform technology infrastructure
	Testing and validation	Certification, product demonstration, product qualification
Business	Incubator/accelerator support	Voice of customer, market assessment, business development, consortia building, offering location
	Access to finance	Financial engineering, connection to funding sources, investment plans
	Skills and education	Courses, workshops, offering technological infrastructure for educational purposes
	Project development	Identification of opportunities, creating consortia, development of proposals

https://ec.europa.eu/futurium/en/system/files/ged/2018_0221_pres entation_on_business_models.pdf

Some early findings

Who pays for what and how?

Mismatch offer-demand?

Public involvement strongly demanded

Mainly private funding

Chart categories (top to bottom):
Project development, Skills and education, Access to finance, Incubator/accelerator support, Testing and validation, Provision of technology infrastructure, Technical support on scale up, Contract research, Strategic R&D, Lobbying, Ecosystem learning, Strategy development, Community building

X-axis: 0%, 20%, 40%, 60%, 80%, 100%

Legend:
■ Entities demanding this service   ■ Entities offering this service

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