acta

French network of Technical Institutes in Agriculture

SWG AKIS – BONN Meeting – 30/31 May 2107

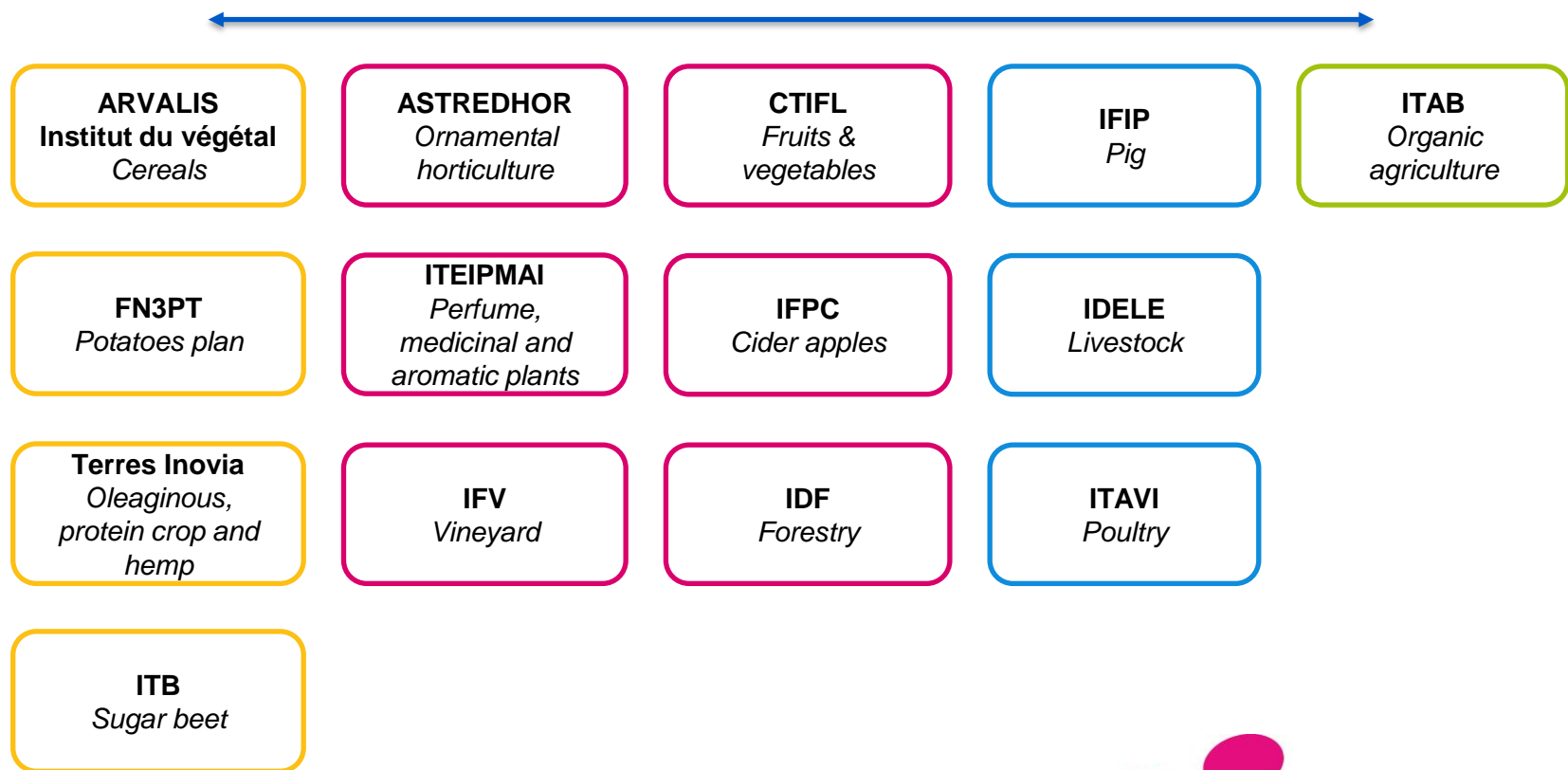## Digitization in the Applied Research

Who we are : key figures

- **15 agricultural technical institutes (ITA) federated in a network with ACTA**

  o specialized by production sector

  o under professional leadership

  o with general interest missions under the agreement of the ministry of agriculture for the programing period 2014-2020

  o private non-profit research organisation /SMEs

- **1800 employees**

- Including **1445** research and /or development **PhD**, **engineers** and **technicians**

- **Budget : 180 millions € / year**

- **More than 2000 publications / year**

- **More than 1400 training courses / year**

Network organisation
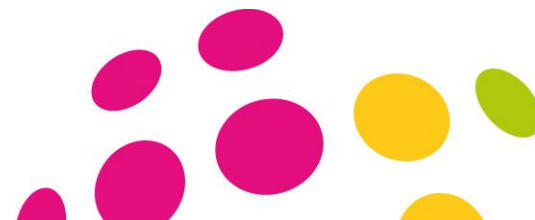
ACTA – Head of network – Cross-cutting issues

ARVALIS **Institut du végétal** *Cereals*	**ASTREDHOR** *Ornamental horticulture*	**CTIFL** *Fruits & vegetables*	**IFIP** *Pig*	**ITAB** *Organic agriculture*
FN3PT *Potatoes plan*	**ITEIPMAI** *Perfume, medicinal and aromatic plants*	**IFPC** *Cider apples*	**IDELE** *Livestock*	
Terres Inovia *Oleaginous, protein crop and hemp*	**IFV** *Vineyard*	**IDF** *Forestry*	**ITAVI** *Poultry*	
ITB *Sugar beet*				

A wide network across French regions

180 regional stations

Missions and scope

Improve all the aspects of the performance of the French farms at short, mid and long terms

Missions

- Interface between oriented research and extension : applied / innovative research (Hybrid activities)
- Expertise to throw light on professional and public decisions
- Network management
- Capture Stakeholder needs to be translated in research questions
- Transfer and dissemination of research results

ACTA

- **Network organisation**
- Coordination and representation of the network members and activities.
- Applied research and transfer (training, dissemination).
- ***Cross-cutting issues***

ITAs

- **Production sector organisations**
- Applied research for both incremental innovation and breakthrough innovation : production of knowledge, experimentation, expertise, technical assistance, transfer.
- ***All aspects of the production chain***

Digital: serving the agricultural sector

– **2015** : creation of the digital group in synergy with all the Agricultural Technical Institutes

– **Major challenge for the coming years**: ability to integrate and interpret new data of Agricultural Research and Development

The API-AGRO project turn to a service company

– **API AGRO**: a Research & Innovation project initiated by ACTA and the French Technical Institutes from December 2013 to June 2016. (In cooperation with INRA and few other R&I Institutes).

– **Platform to centralize datasets** and manage their visibility, access and valorization in one place.

– API is an acronym for **Applications Programming Interface**. An API is a programming interface that allows you to "plug in" to an application to exchange data

The API-AGRO project turn to a service company

– The platform delivers **access to various assets (datasets and API)** improving their visibility (*public, restricted or private*), their accessibility, their interoperability and their reuse while warranting high level of security and traceability.

– **As a food factory**, the platform harvest raw materials (data) to set-up refined products, which can be put together to be valorized directly in a throng of apps

– 2017 - Creation of a **company** focusing on data

Open Innovation: Co-build the services by mobilizing new partnerships and skills

1. Co-build digital services useful for the agricultural actors
- work with the farmers on the services of future
- more adapted services

2. Evaluate the applications in the farms
- tests in real conditions
- objective evaluations of the services

3. Open to new partnerships
- a strategic monitoring
- a richer and more open partnership
- an effective and well-balanced partnership
- workshops of creativity

4. Strengthen the skills to better value the data
- an ambitious training plan
- collaborations with schools
- recruitments of new talents
- a mutualisation of the skills

INNOVATE

Mobilize the technologies to fluidize the exchanges of data

5. Catalogue the sources of data of interest for agriculture
- an inventory of the sources of data

6. Favor the interoperability between information systems
- data and accessible services by API
- more integrated services

7. Mutualize information systems
- successful and ergonomic information systems
- capitalized data

FLUIDIZE

REASSURE

Clarify the questions of property and transparency to reassure the actors

8. Establish principles and best practices
- a charter on the access and the valuation of the agricultural data
- services and data connected with full transparency
- a commitment of the ITA to apply these good practices

9. Guarantee the control of the data and establish a trust chain
- a passport for the agricultural data
- transparent and revocable uses

10. Encourage the opening of the data of companies
- a financial or technical support to open the data

French "Digifarms" to foster digital innovations

- **"Digifarm" project**: to develop connected agriculture / IoT

- A **partnership of 4 Technical Institutes** (ARVALIS, IDELE, ITB and Terres Inovia)

- 2 "DigiFarms" as **test connection tools <u>in real conditions</u>**

- 2 new "DigiFarms" to be launched by the end of the year

- The main objective is to **move from concept to application** by using an open research approach between R&I Institutes, farmers, private actors..
- **Start-up & Companies** invited to test new devices, sensors…

- 2 "DigiStations" to be launched soon…

#APPS: l'index acta by @SMAG

– Simple and ergonomic **mobile application**: the digital version of the **phytosanitary acta index**

– Essential **tool for the choice and the use of plant health products** commercialized in France

– Realized for farmers, advisors, students and instructors

partenariat acta/smag

L'Index Acta **DANS VOTRE POCHE !**

Index Acta by SMAG

DISPONIBLE SUR **App Store**

DISPONIBLE SUR **Google play**