

Compliance in Agri Food Supply Chains

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Main contributors: Robbert Robbemond, Youri Dijkxhoorn,
Tim Verwaart



Outline

- What is compliance?
- Compliance: Fresh table grapes in South-Africa (Use Case)
- A generic compliance architecture
- An open information architecture

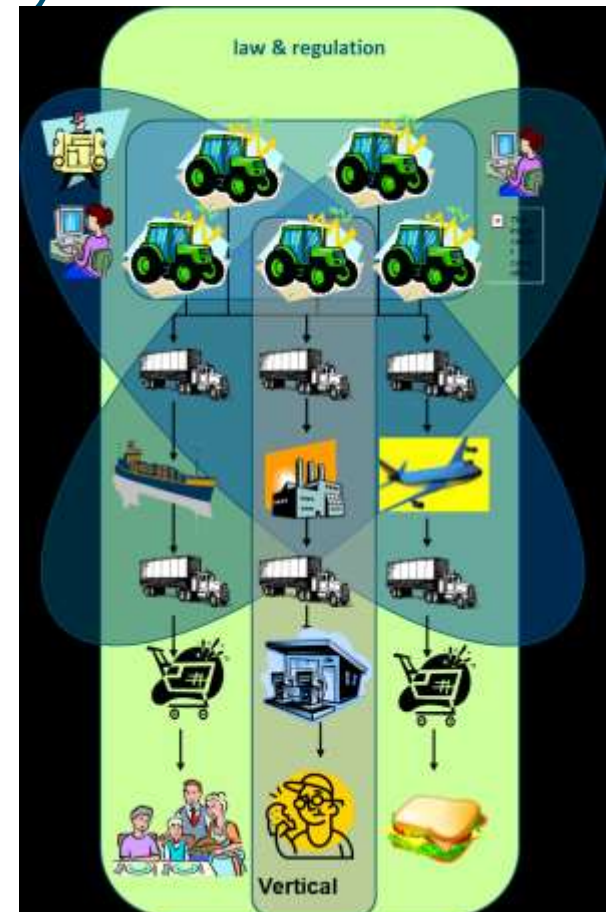
Compliance

"The action or fact of complying with a wish or command"
(Oxford Dictionaries)

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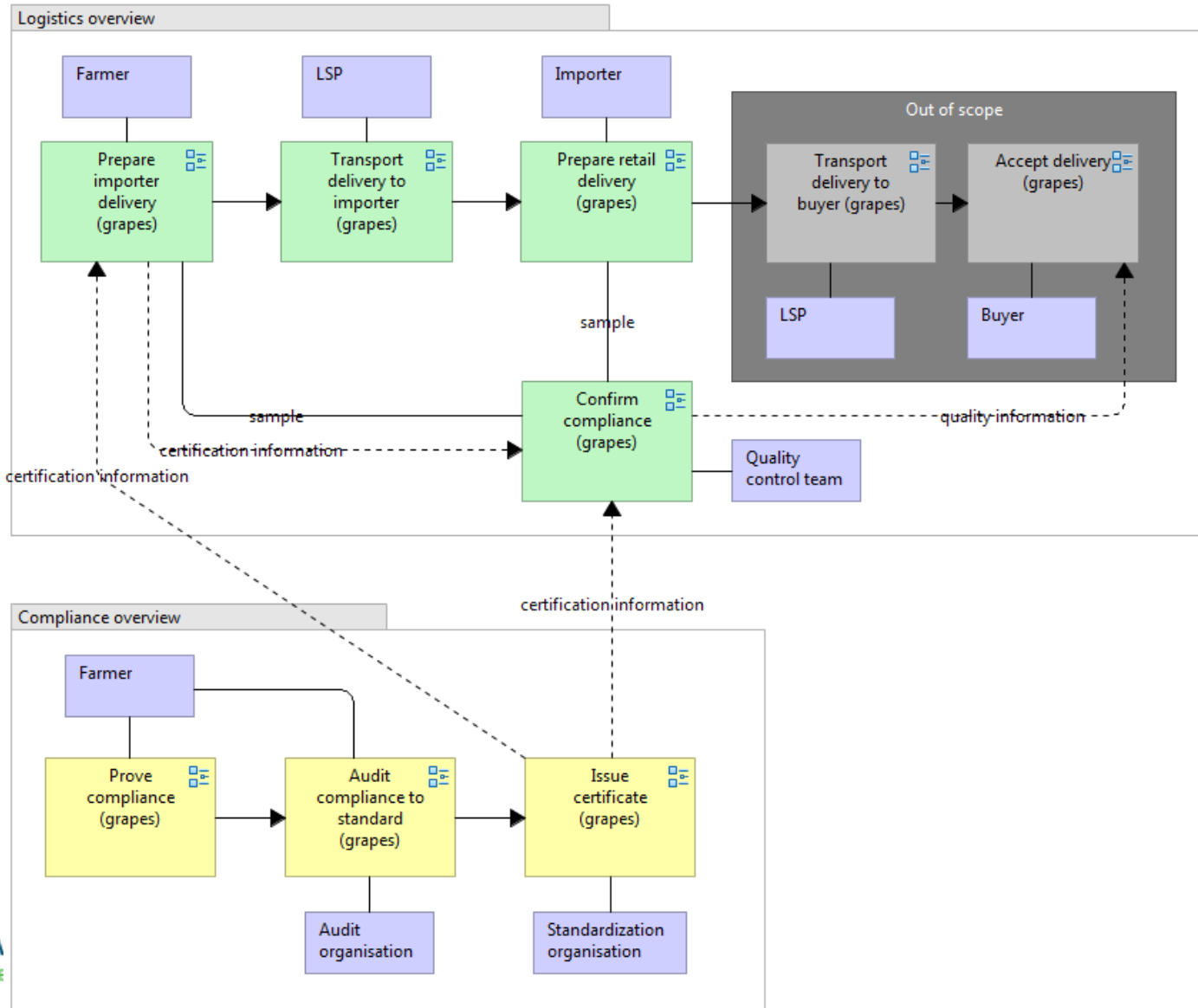
- GlobalG.A.P.
- Organic certificate
- SIZA (Global Social Compliance Programme)



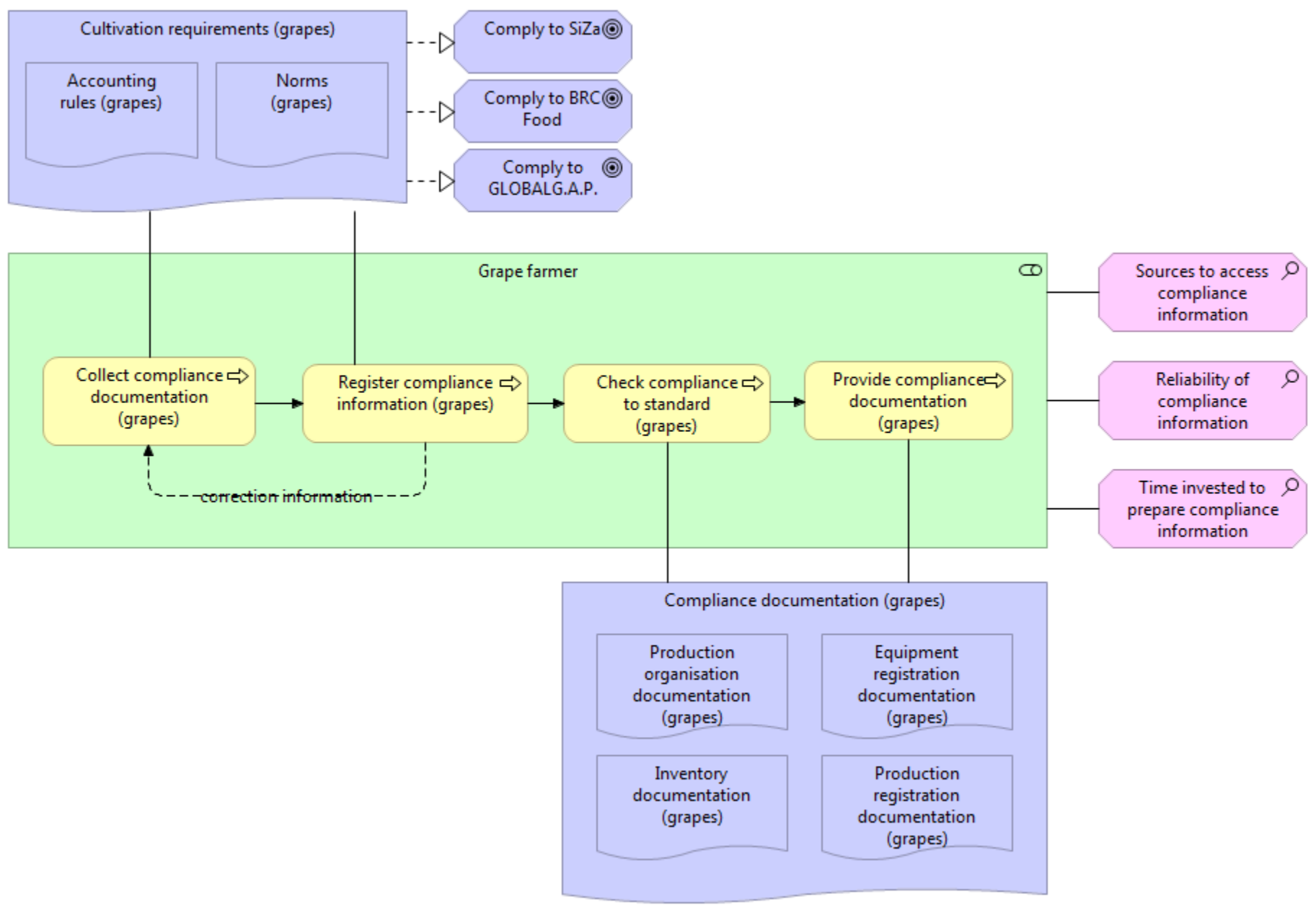
Compliance: the use case fresh table grapes in South Africa

- Two major grape growing areas:
 - Orange River Valley in the Northern Cape
 - Hex River Valley in the Western Cape
- Grape production is about 1,800,000 tonnes per annum of which about 300,000 tones are table grapes
- About 300 companies involved

Generic Model Table Grapes



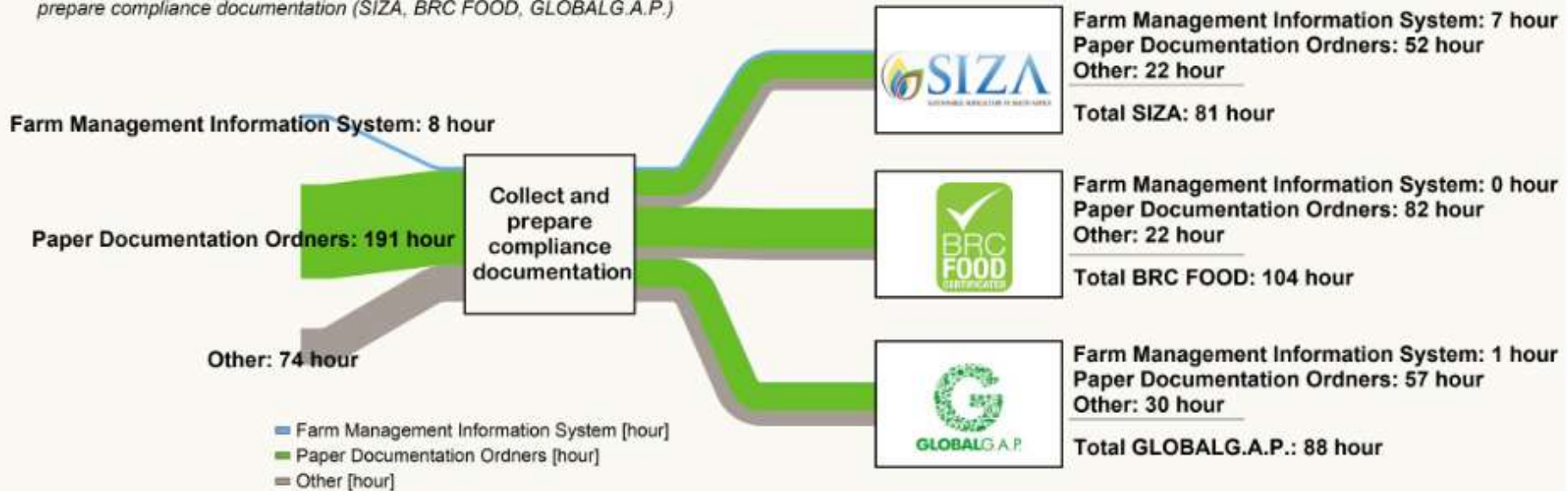
Prove compliance (grapes)



Use Case fresh table grapes

Sources to access compliance information

Information sources consulted by South African grape farmers to collect and prepare compliance documentation (SIZA, BRC FOOD, GLOBALG.A.P.)



Source:  FarmDigital

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Use Case fresh table grapes

Time invested to prepare information

Time invested by South African grape farmers to collect and prepare compliance documentation (SIZA, BRC FOOD, GLOBALG.A.P.)



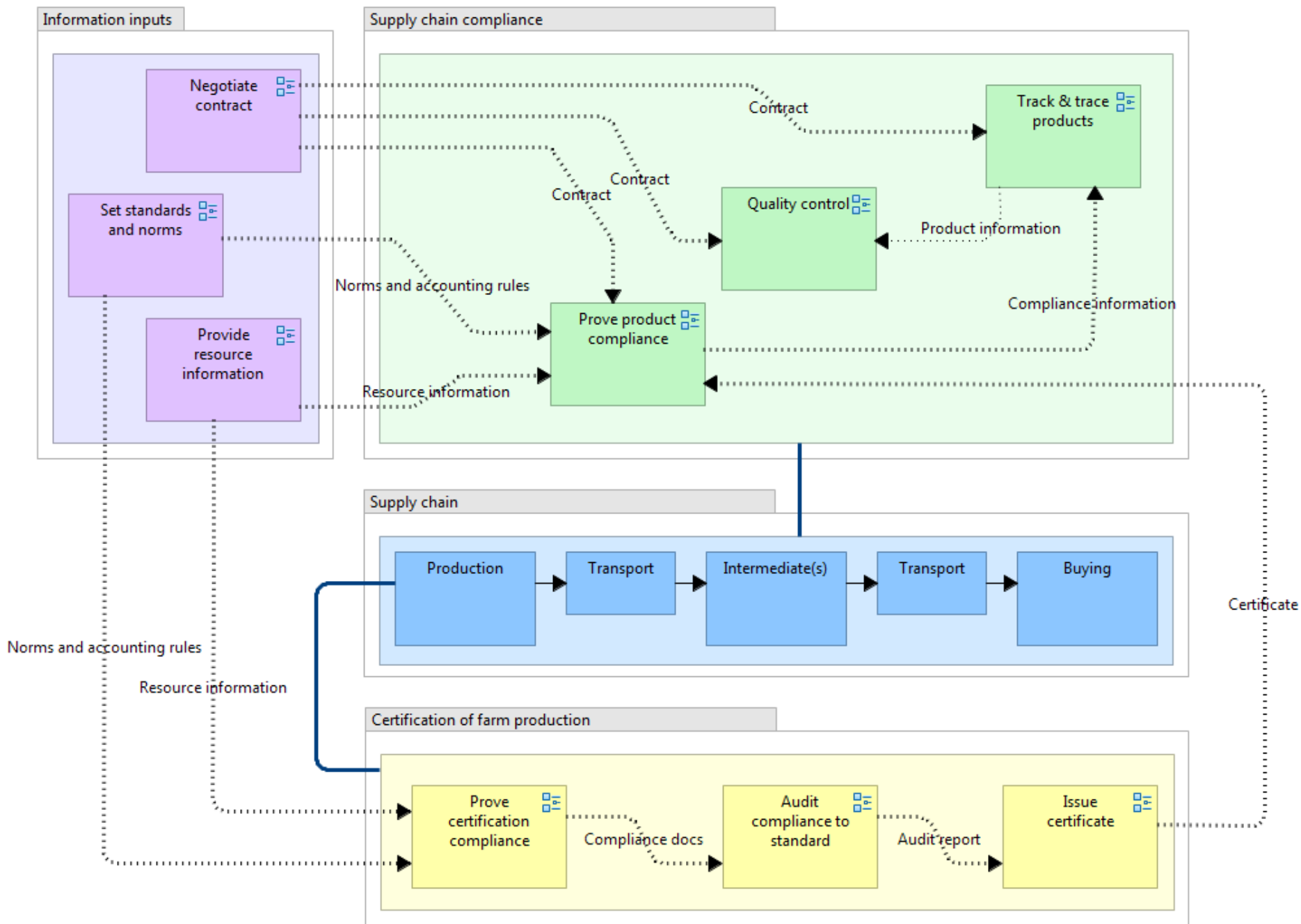
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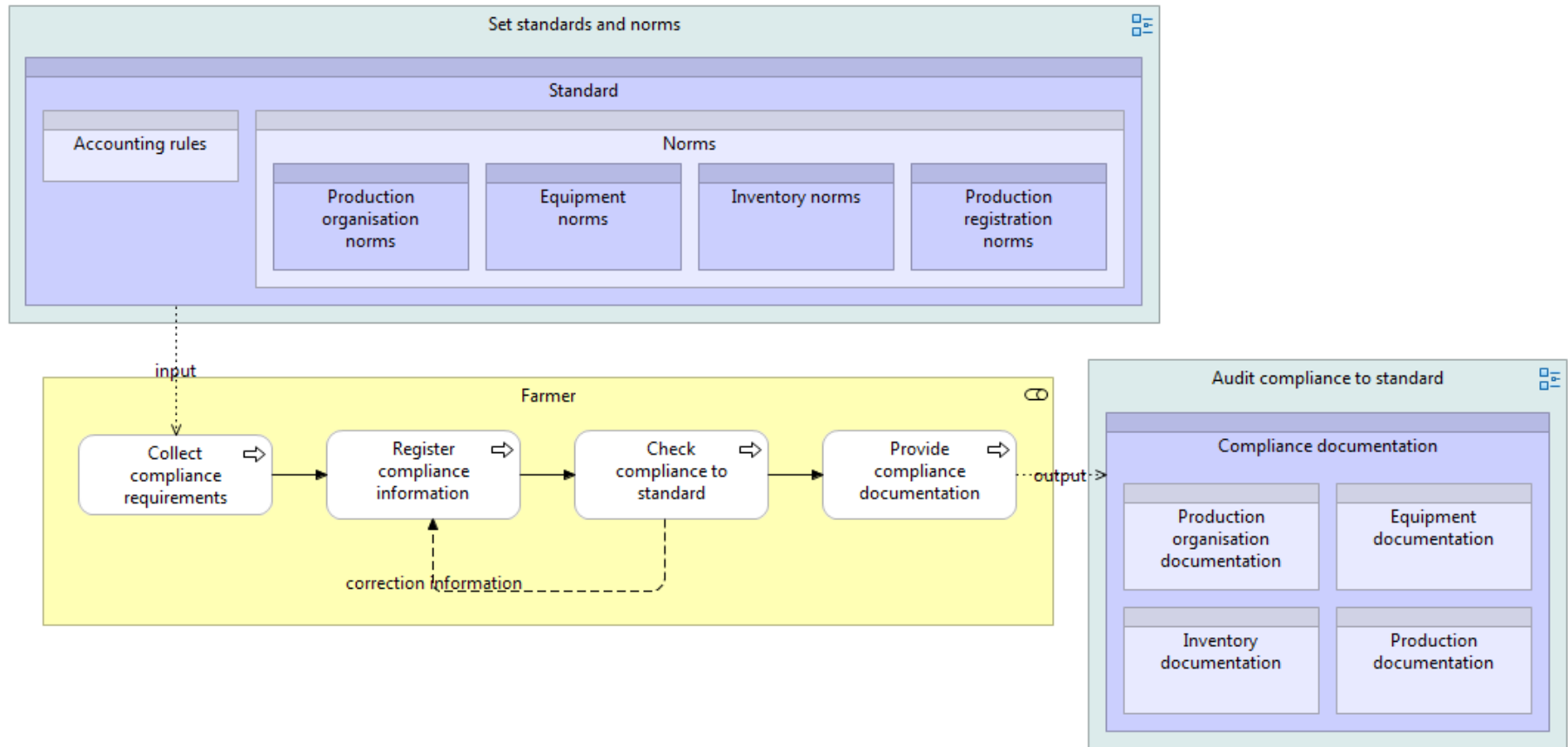
Generic Compliance Architecture

- The generic compliance architecture describes actors, processes and information exchange related to compliance in agri-food supply chains.
- This generic compliance architecture is designed based on the use cases:
 - Table grapes (South-Africa)
 - Melons (Costa Rica)
 - Potatoes (The Netherlands)



Prove Certification Compliance

Prove certification compliance



Website

- <http://www3.lei.wur.nl/farmdigital/Models.aspx>

What's an Open Information Architecture?

An **Open Information Architecture** allows information (messages) to flow easily between different software systems.

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It describes the **information exchange** across more or less independent software systems on the **syntactical and technical levels**, against common background knowledge of the business processes to be supported.

Why develop an Open Information Architecture?

- An Open Information Architecture enables:
 - Data exchange between software systems
 - Supports alignment of software solutions with this open information architecture
 - Contribute to a more efficient data exchange

Presenting the Information Architecture

- What constitutes the information Architecture:
 - A Generic Compliance Architecture describing Compliance including; actors, roles, business processes, information objects
 - Guideline to Connect to an Open Information Architecture
 - Links to standardized messages to enable data exchange

Concluding remarks

- For what can the Information Architecture be used?
 - To gain insight into the context of compliance (actors, processes, information and data)
 - To get an overview of the processes and the standards supporting the processes
 - To connect with systems of other vendors to improve data exchange
 - To enable standardized data exchange

Website compliance process content



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Choose a viewpoint

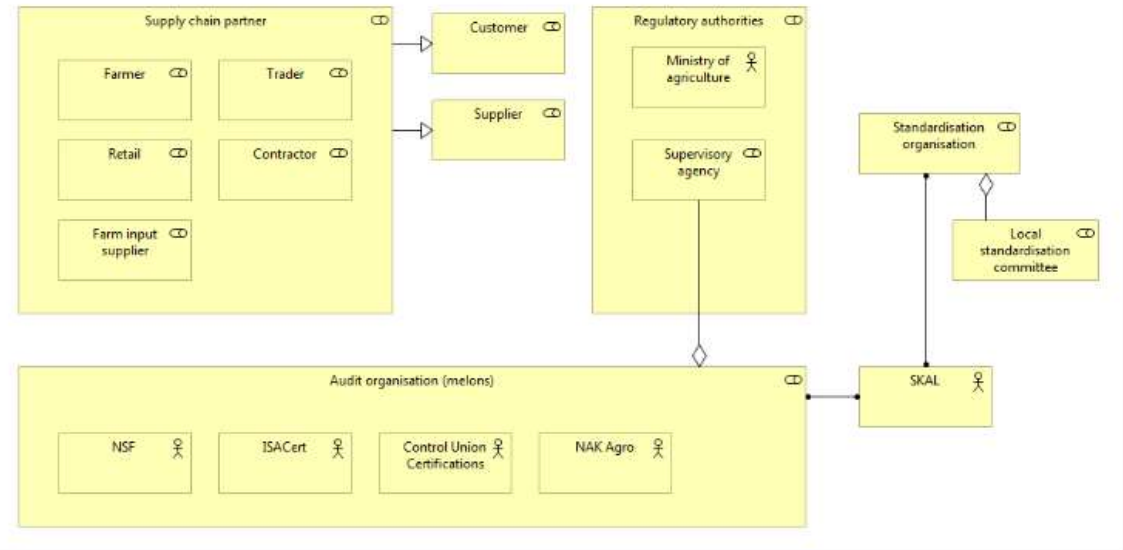
Generic compliance model

Menu

- Compliance process context
 - Roles and actors
- Generic compliance model
 - Information inputs
 - Negotiate contract
 - Set standards and norms
 - Provide resource information
 - Certification of farm production
 - Prove certification compliance
 - Audit compliance to standard
 - Issue certificate
 - Supply chain compliance
 - Prove product compliance
 - Quality control
 - Track & trace products

Generic model view

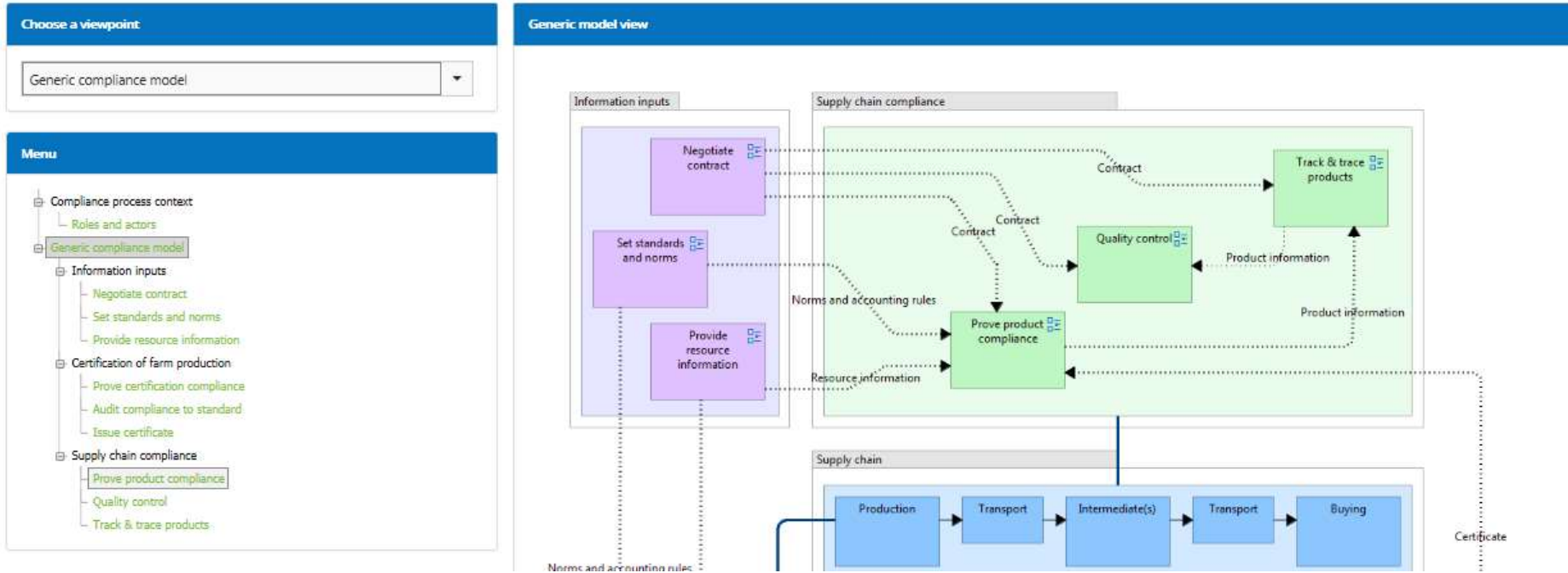
Roles and actors



Website Generic compliance model



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Poll

- Improving compliance processes requires improvement of data exchange between software systems
- An information architecture can align software development to improve data exchange