

sahel

Satellite African eHealth vaLidation

Harwell (UK), 20th April 2012

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Ref: S



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LE KINKELIBA
ASSOCIATION D'AIDE AU DEVELOPPEMENT MEDICAL

SAHEL (Satellite African eHEalth vaLidation)

Demonstrate the potential suitability of satellite based technology to extend the reach of health services and to complement other forms of ICT in support of health through the deployment of several pilot sites in Africa

- **ESA Third party funded initiative:**
 - Funded by EC (European Commission)
 - ESA (European Space Agency) as implementation agency
 - Included within ARTES 20 eHealth program
 - Due to interest on the topic: SAHEL Consortium partners agreed to invest and fund the e-HMIS platform

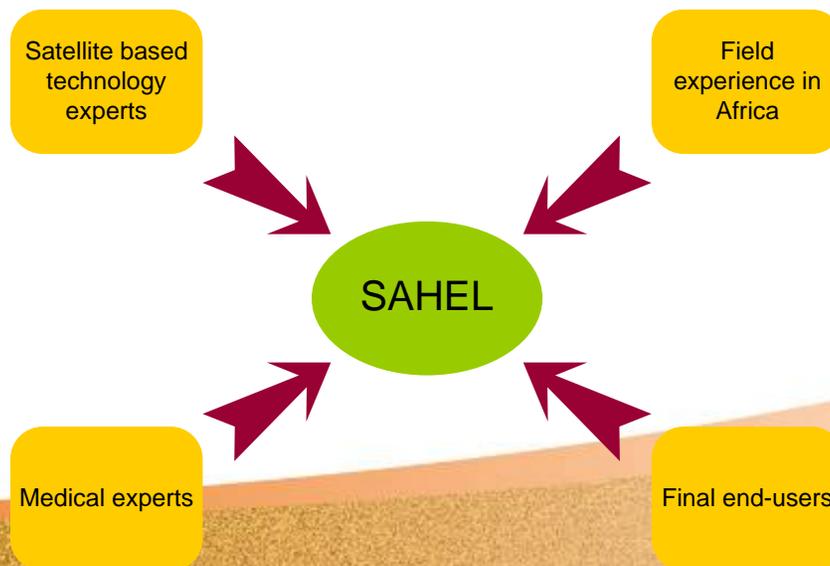
- **Selection process**
 - ESA classic Public ITT (Invitation to Tender) process
 - Awarded to SAHEL Consortium after evaluation and negotiation.

- **Project management**
 - Classical ESA project: Monthly reports, Progress Meetings and Reviews

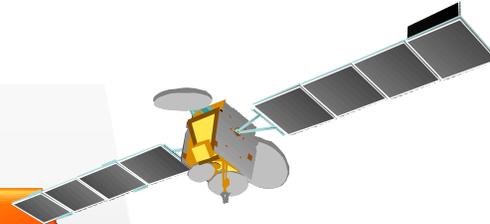
- **Duration of the project**
18 months (from KO to Final Review)

SAHEL: designed from Users Needs

- **The main strengths of the SAHEL project are:**
 - **its user driven approach**
 - **the consortium in charge of its implementation, with its expertise in all required sectors**
 - **the fact it includes the complete value chain of actors:**
 - **medical staff and personnel on the ground,**
 - **medical experts in Africa**
 - **technical partners in charge of the satcom based interconnectivity services.**
 - **On-ground demonstration through two piloting: Senegal & Kenya**



Objective Nr 1: Medical eContent via satellite



Kajiado, Kenya

Selection of isolated areas in sub-Saharan Africa

Health contents selection from African centres of excellence

User needs assessment

Make eContents available on demand

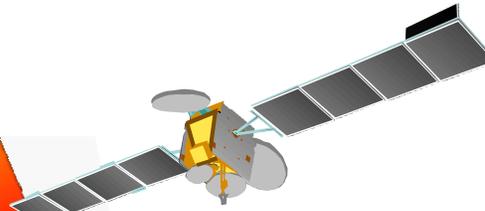
Update eContents following users feedback and system extensions



Wassadou, Senegal

Objective Nr 2: Clinical Services via satellite

Satellite-Based Clinical Services for Remote Areas



Kajiado, Kenya



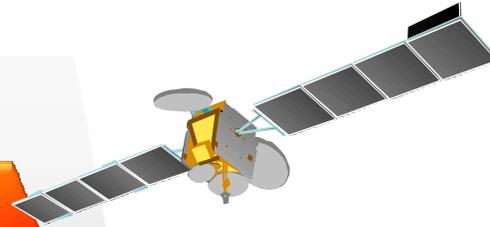
Kajiado, Kenya



Wassadou, Senegal

- Diagnostic, therapeutic and emergency management support
- Collaborative tools for health workforce
- African centres of excellence providing specialist support for telemedicine
- Building networks of health workers
- Medical data collection

Objective Nr 3: eHealth MIS



Kajiado, Kenya



Wassadou & Sinthian, Senegal

- Promote the usage of eHealth platform services
- Management of health resources
- Building networks of health workers
- Disease surveillance and control
- Flexible retrieval of information

The screenshots show a web-based interface for managing vaccination records. The interface includes a sidebar with navigation options like 'Actividades personalizadas', 'Actividades Sanitarias', and 'Programas de Salud'. The main content area displays a 'Banco de Vacunación Infantil 2016 FECHA NACIMIENTO' with a table of vaccination data.

Plazo/Vacunación	SCG-ID	USUM	Fecha	DTP + Hg	DTP	SRG	USP
1 mes	36						
2 meses		36					36
4 meses		36					36
6 meses			36				36
12 meses					36		36
18 meses						36	36

SAHEL Consortium

-  Project coordinator
-  User interface
-  eLearning content
-  Technical partner



- Project coordinator
- Responsible for the development and integration
- Coordinator for the demonstration in Senegal

- Local interface in Senegal
- Responsible for the user need collection & analysis



- Local interface in Kenya
- Responsible for the provision of eLearning content in Kenya
- Coordinator for the sustainability analysis and the dissemination



- Responsible for the provision of the eLearning content in Senegal



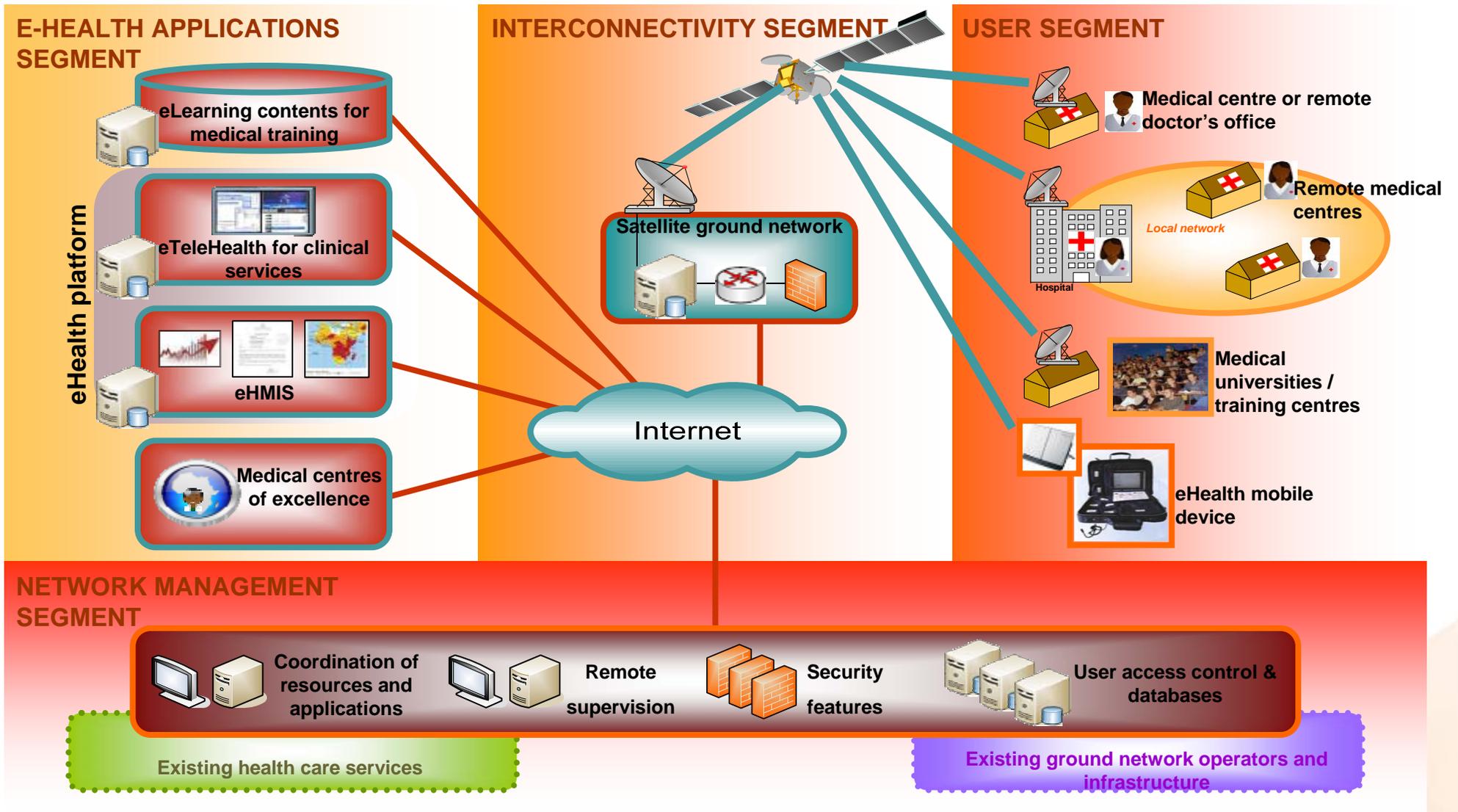
- Responsible for the provision of the eHealth platform



- Coordinator of the Service Definition and Design
- Provision of the fixed satellite connectivity
- Coordinator of the Cost Benefit Analysis



SAHEL Network Architecture

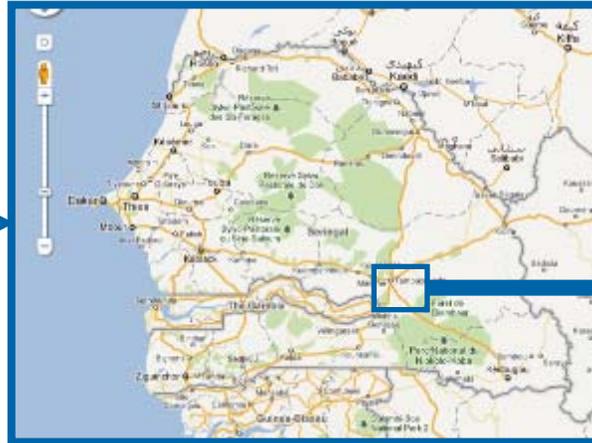


SAHEL pilot sites in Senegal: Wassadou & Sinthian

Distances :

Dakar – Tambacounda : 450 km

Tambacounda – Wassadou : 55 km



Sinthian



Senegal

**Tambacounda
Region**

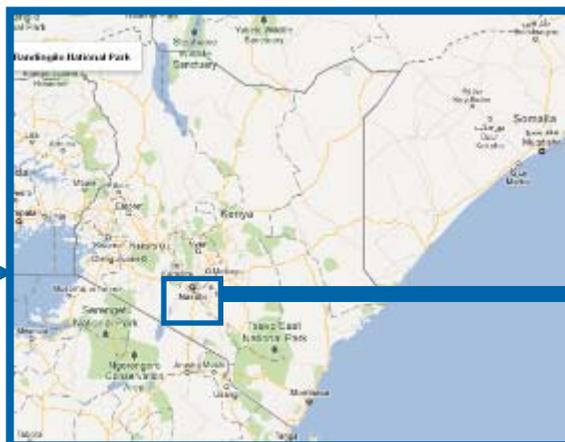
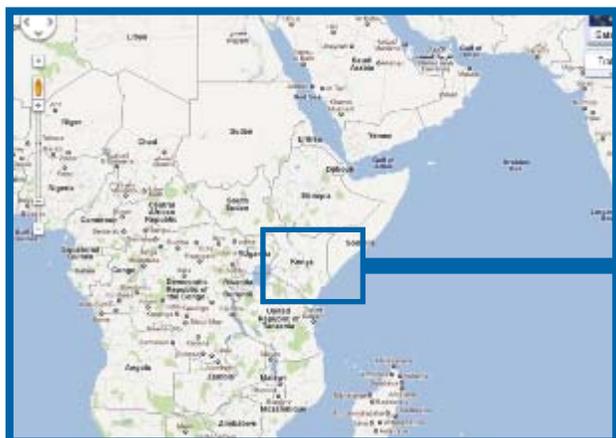


Wassadou

SAHEL pilot site in Kenya: Kajiado

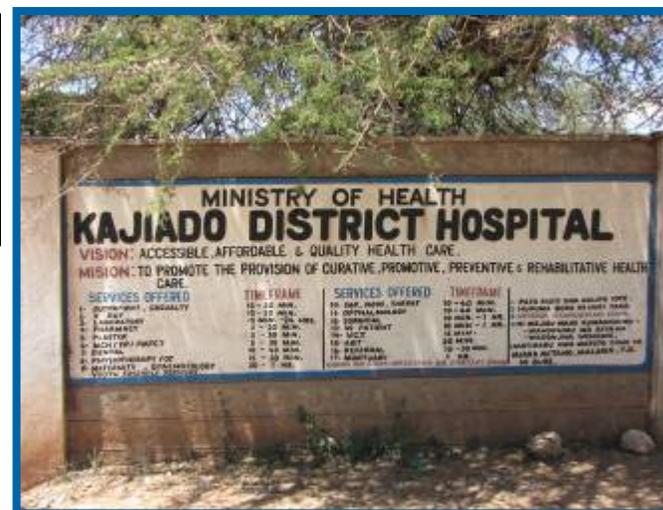
Distances :

Nairobi Kajiado : 90 km



Kenya

**Kajiado
District**



SAHEL performed tasks

- **User-needs collected through national surveys**
 - 151 questionnaires in Senegal and 533 in Kenya across the full health pyramid
 - Disseminated to national stakeholder in a devoted User Workshop Event for feedback
- **Interconnectivity service defined based on**
 - Available resources
 - Collected needs
 - Characteristics of the selected pilot sites
- **Adaptation of existing platform modules**
 - Adaptation to user requirements
 - Integration of building blocks from different partners

SAHEL current status

- **In the last step for pilot site deployment**
 - Purchase process under finalisation
 - Preparation of installation, maintenance and evaluation procedures
- **Consolidation of Cost Benefit Analysis and Sustainability task**
 - Asses potential benefits of a SAHEL like platform
 - Identify African sustainability opportunities beyond the project
 - Study scaling-up opportunities

SAHEL challenges

- **Related to project management:**
 - Third party funding scheme visible during project proposal preparation but mainly transparent during operation
 - Main difficulty up to now: not possibility of CCNs with budget impact to assume project evolutions
 - Short time frame for a complex work across different cultures and distant countries (within Africa and Europe)
 - Piloting experience as first proof of concept with limited budget but high expectations
 - Involvement of heterogeneous actors of very different profiles, interests and priorities (medical, technical, administration, NGOs ...)

- **Related to project content:**
 - Adequacy to the real user needs, avoid technology push
 - Sustainability:
 - **Require strong synchronisation with Ministries of Health policies**
 - **Ensure motivation and implication of national stakeholders**

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Thank you for your attention

Any questions?



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