

sahel

Satellite African eHEalth vaLidation

Harwell (UK), 20th April 2012

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ASTRIUM
CASA ESPACIO
AN EADS COMPANY



SES
your satellite company



Ref: S



indra

1_Rev

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**

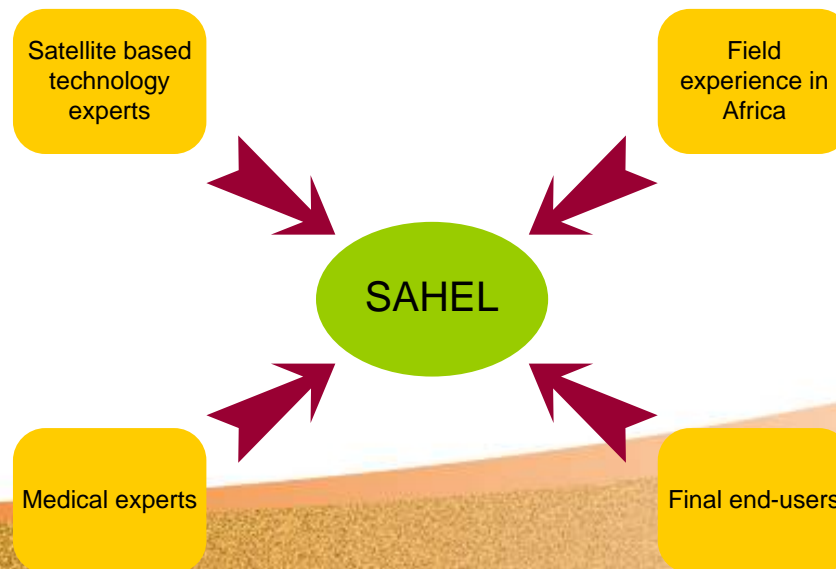
- Classical ESA project: Monthly reports, Progress Meetings and Reviews

- **Duration of the project**

18 months (from KO to Final Review)

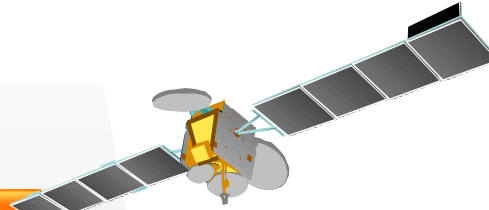
SAHEL: designed from Users Needs

- **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

Medical e-Content via Satellite for the African Health Workforce



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

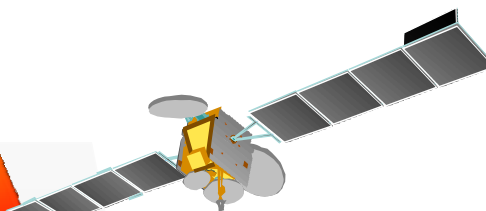
Update eContents following users feedback and system extensions



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

e-Health Management Information System Pilot

Promote the usage of eHealth platform services

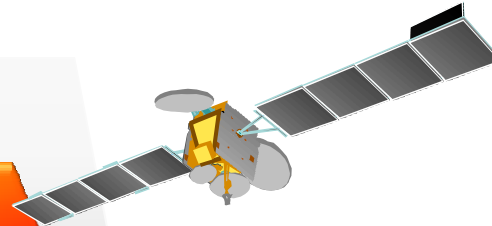
Management of health resources

Building networks of health workers

Disease surveillance and control

Flexible retrieval of information

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Kajiado, Kenya



Wassadou & Sinthian, Senegal

Plazo/Vacunación	BCG-D	DTaP	Polio	DTaP + Hib	DTaP	MM	MM
1 mes	30						
2 meses		30					
4 meses			30				
6 meses				30			
8 meses					30		
12 meses						30	
15 meses							30

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

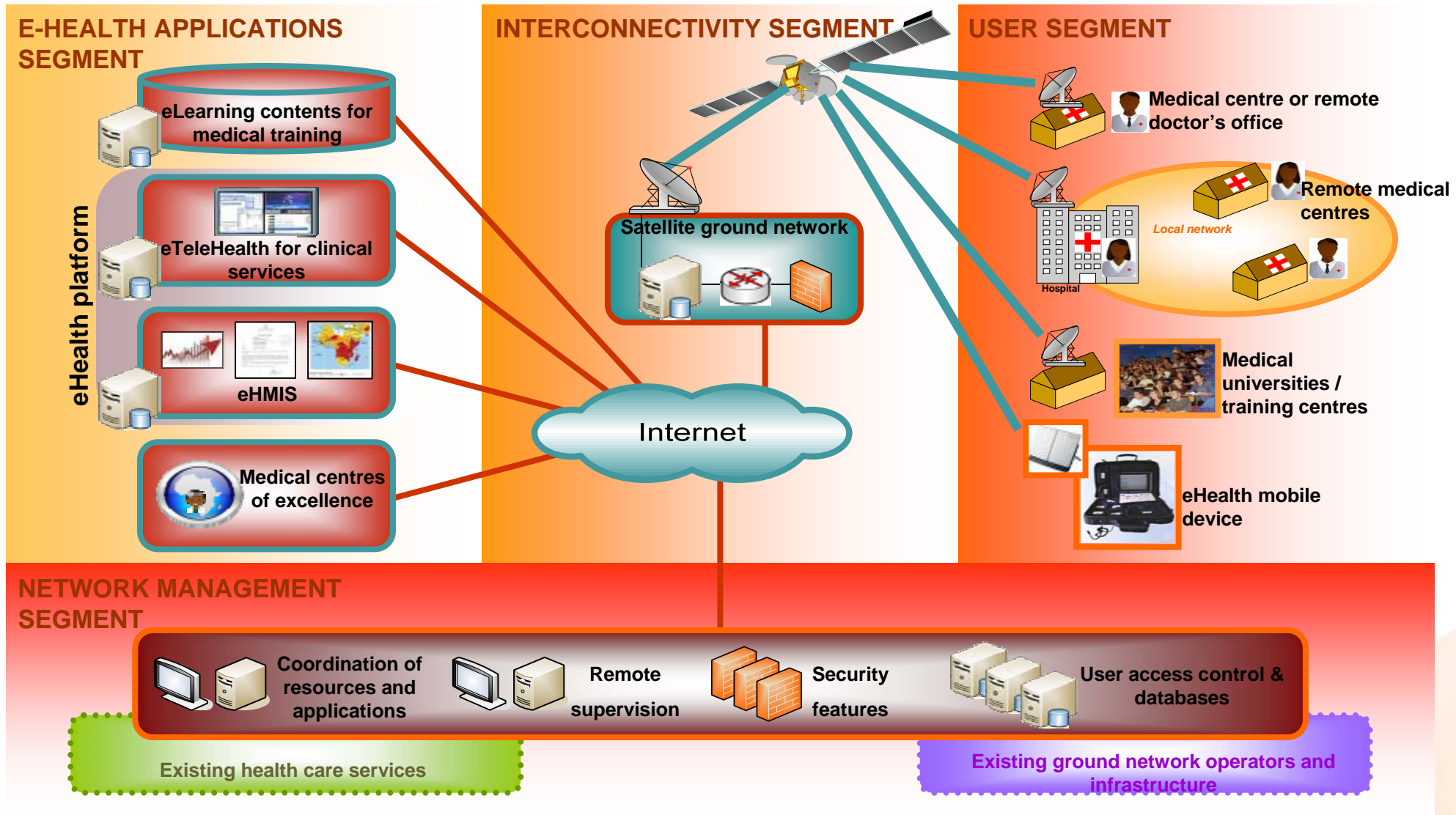


- Responsible for the provision of the eHealth platform



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

SAHEL Network Architecture

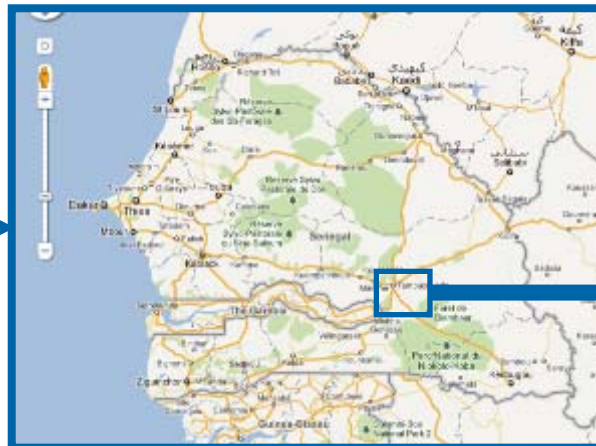
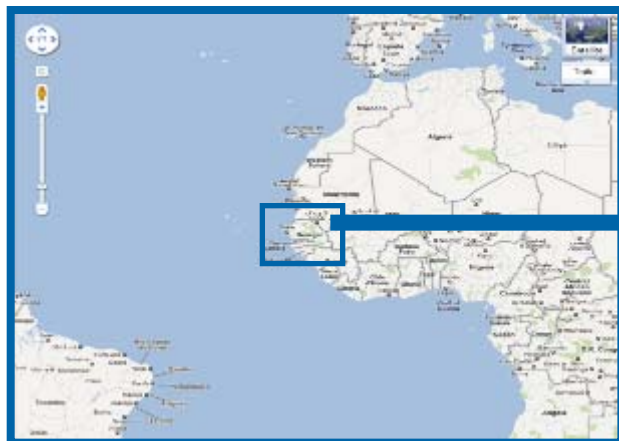


SAHEL pilot sites in Senegal: Wassadou & Sinthian

Distances :

Dakar – Tambacounda : 450 km

Tambacounda – Wassadou : 55 km



Sinthian



Senegal
Tambacounda
Region

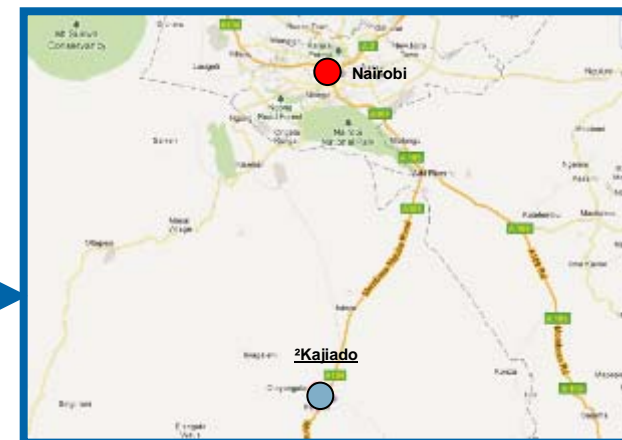
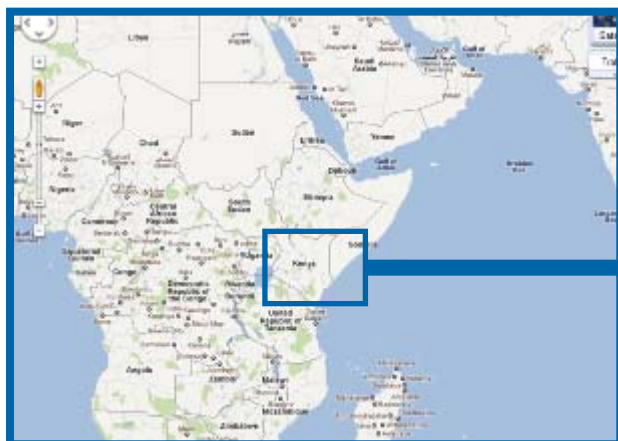


Wassadou

SAHEL pilot site in Kenya: Kajiado

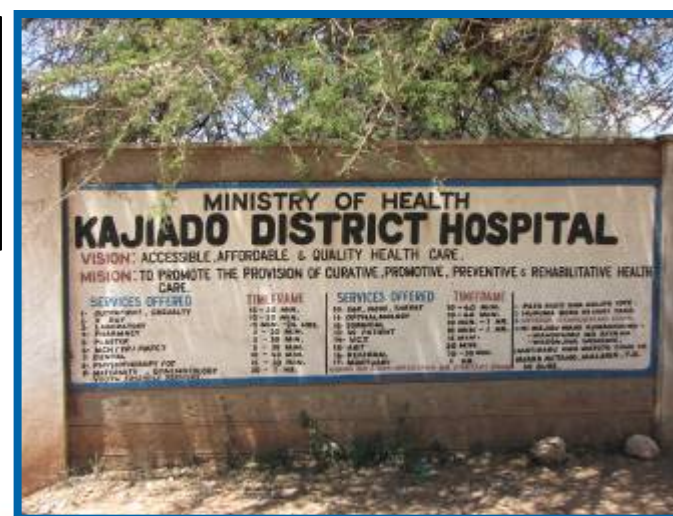
Distances :

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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