

INTEGRATION OF SPATIAL DATA INFRASTRUCTURES INTO NATIONAL INFORMATION POLICIES :

Linking SDI and NICI Development Processes To Speed Up the Emergence of the African Information Society

PLAN

1. WHAT IS THE ISSUE ?
2. WHAT ARE THE MAIN FINDINGS OF THE STUDY ?
3. WHAT ARE THE CONCLUSION AND RECOMMENDATIONS ?
4. WHAT NEXT ?

WHAT IS THE ISSUE ?

ORIGIN OF NICI AND SDI DEVELOPMENT PROCESSES IN AFRICA

MAY 1996: ADOPTION OF AN AFRICAN INFORMATION SOCIETY INITIATIVE (AISI), BY RESOLUTION 81 2(XXXI) OF THE 22 ND MEETING OF THE ECA CONFERENCE OF MINISTERS

THE AISI CALLS FOR THE FORMULATION AND DEVELOPMENT OF A NATIONAL INFORMATION AND COMMUNICATION INFRASTRUCTURE (NICI) PLAN IN EVERY COUNTRY IN AFRICA

ORIGIN OF NICI AND SDI DEVELOPMENT PROCESSES IN AFRICA

JUL 1999: FIRST MEETING OF THE COMMITTEE ON DEVELOPMENT INFORMATION (CODI) , A BIENNIAL FORUM INVOLVING THE GI, ICT, AND STATS STAKEHOLDERS IN AFRICA

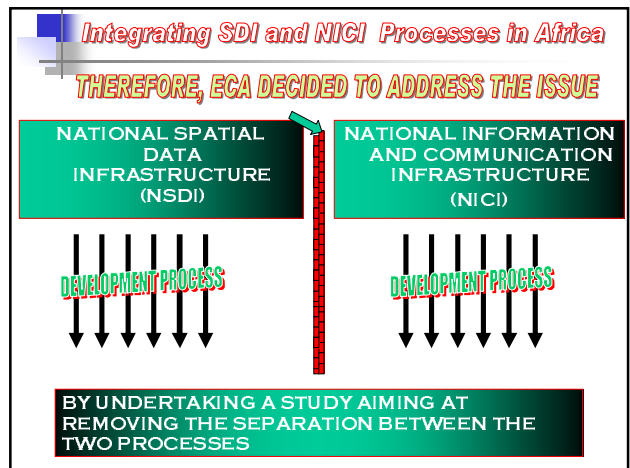
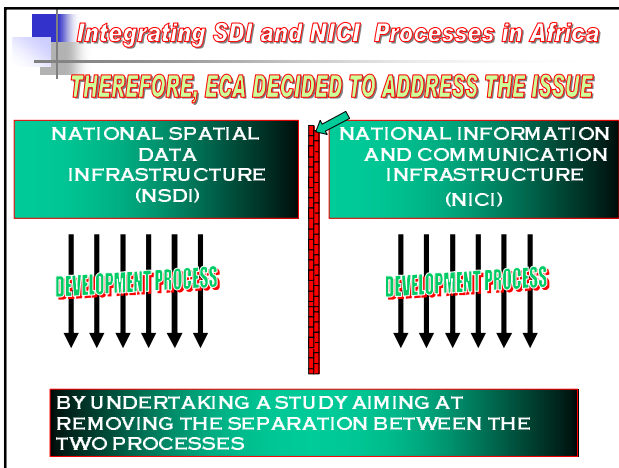
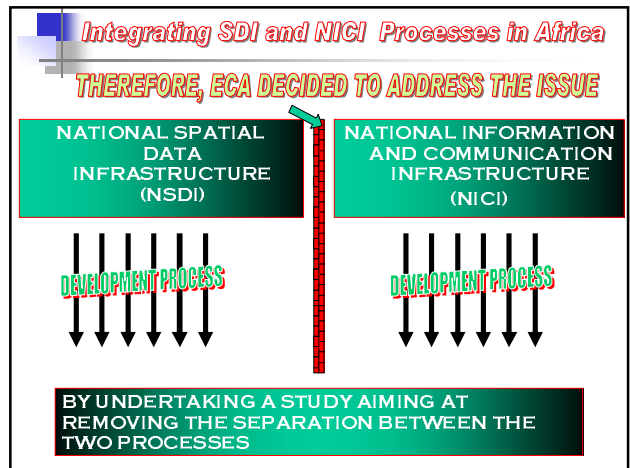
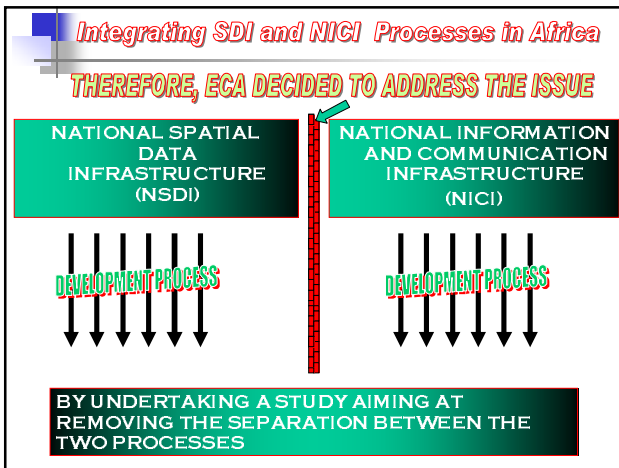
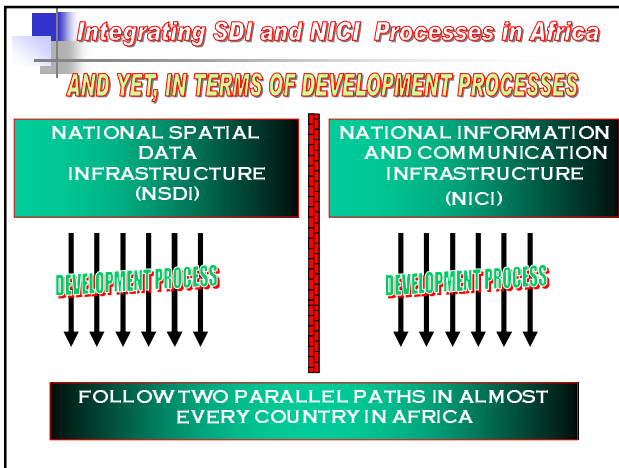
ADOPTION OF A RESOLUTION ON THE DEVELOPMENT OF POLICIES AND STRATEGIES FOR THE ESTABLISHMENT OF A NATIONAL SPATIAL DATA INFRASTRUCTURE (SDI) IN EVERY COUNTRY

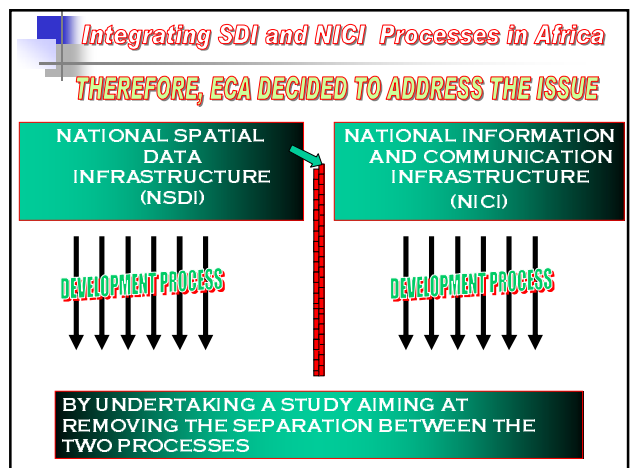
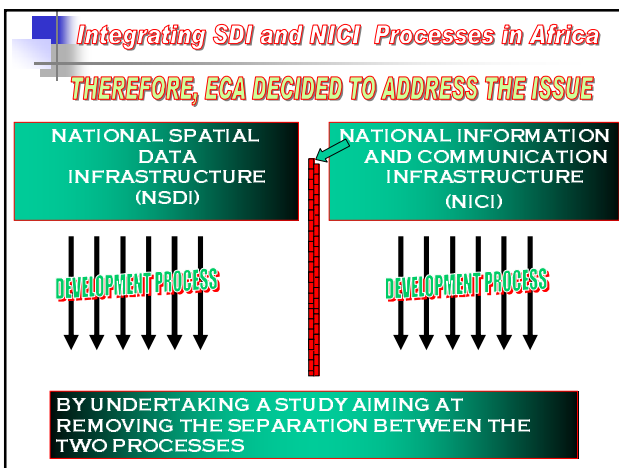
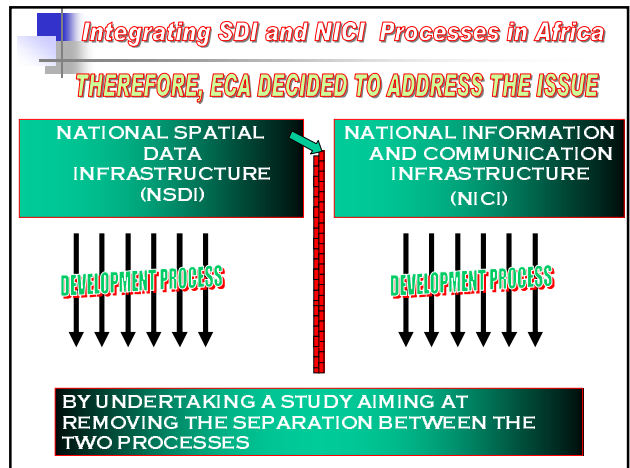
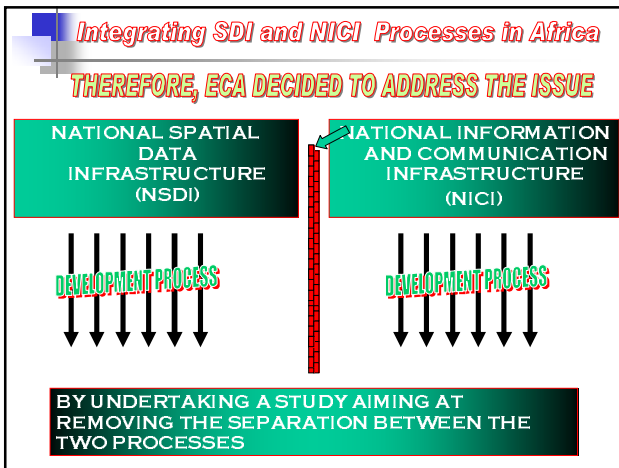
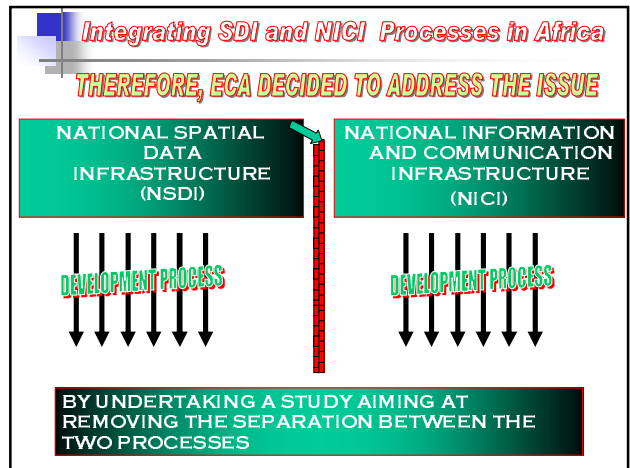
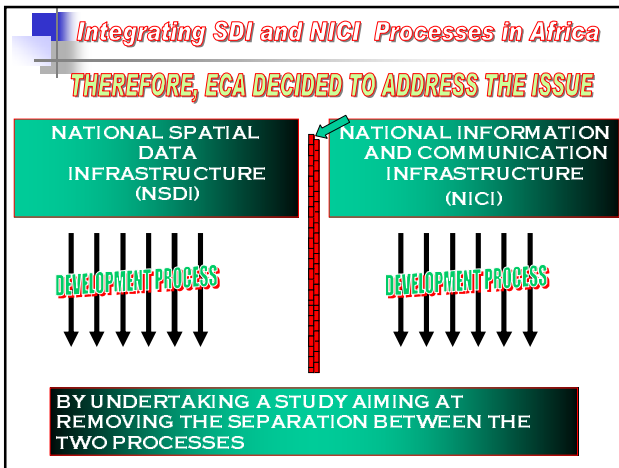
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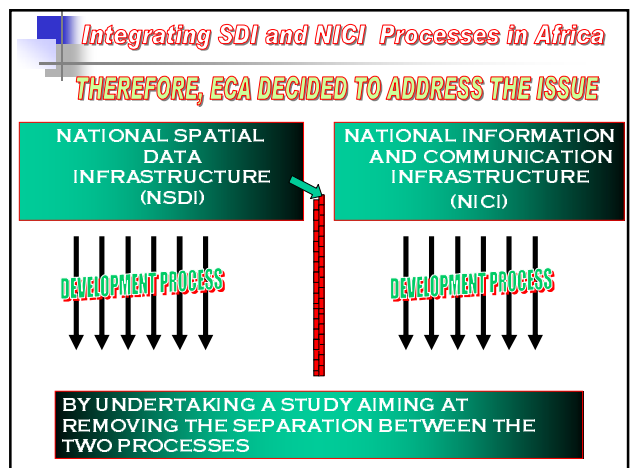
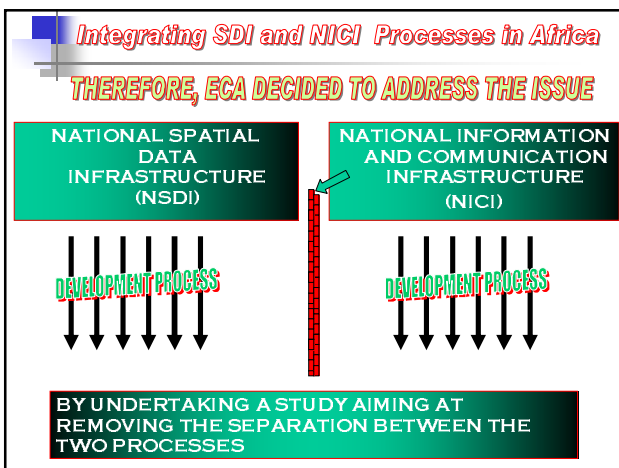
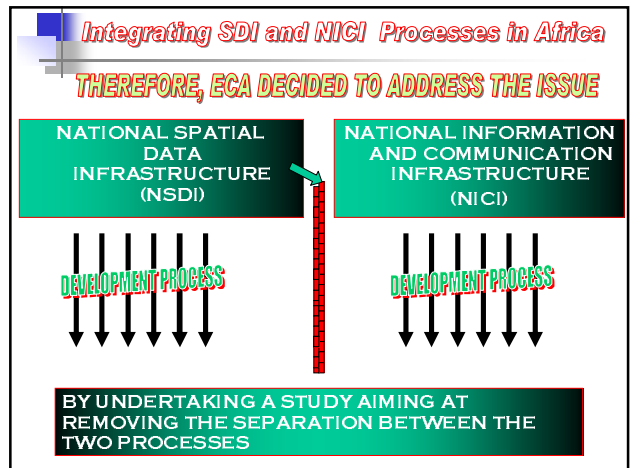
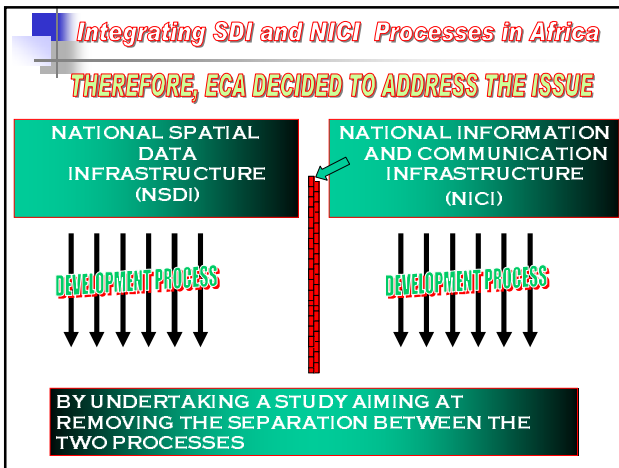
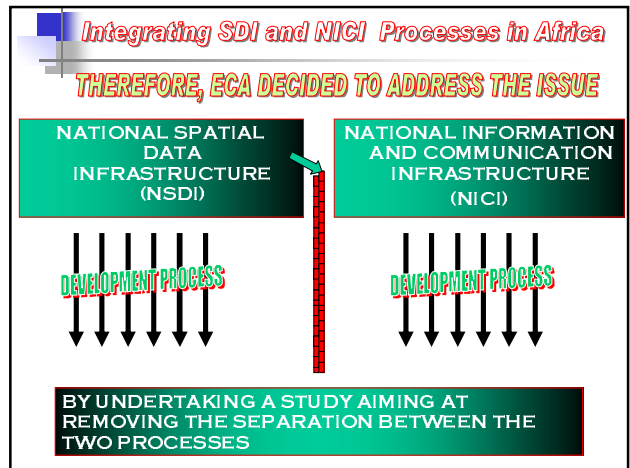
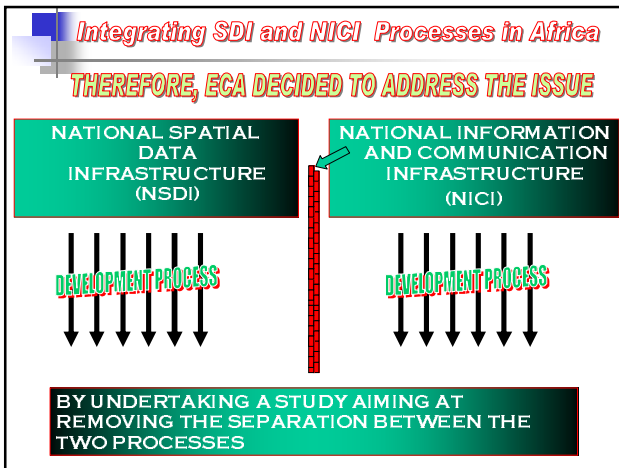
NATIONAL SPATIAL DATA INFRASTRUCTURE (NSDI)

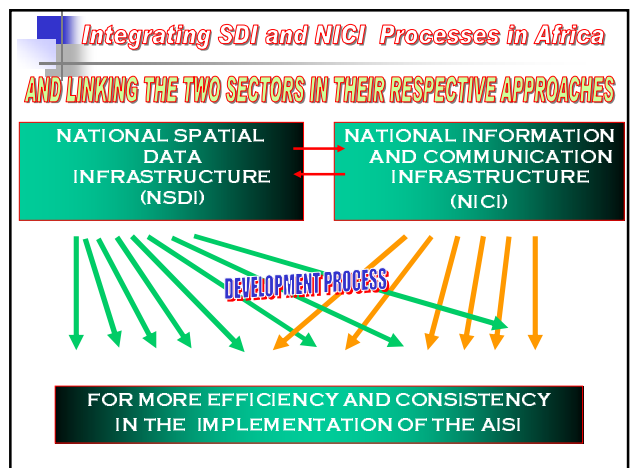
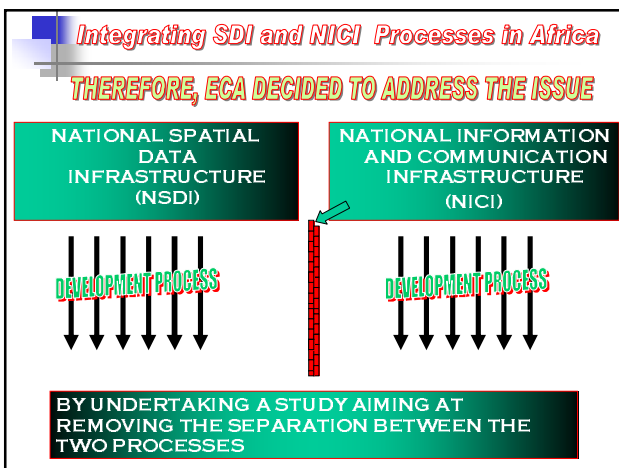
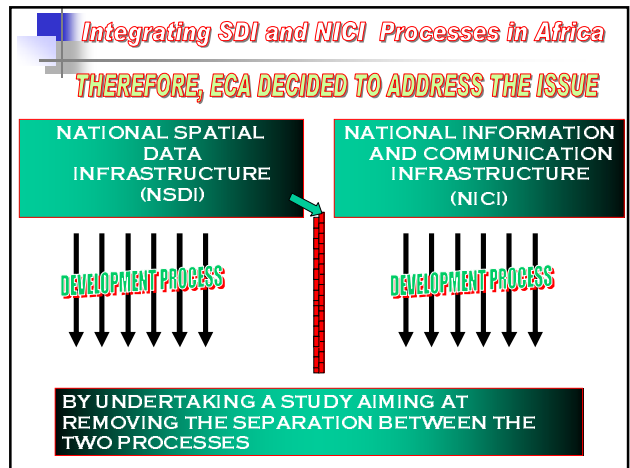
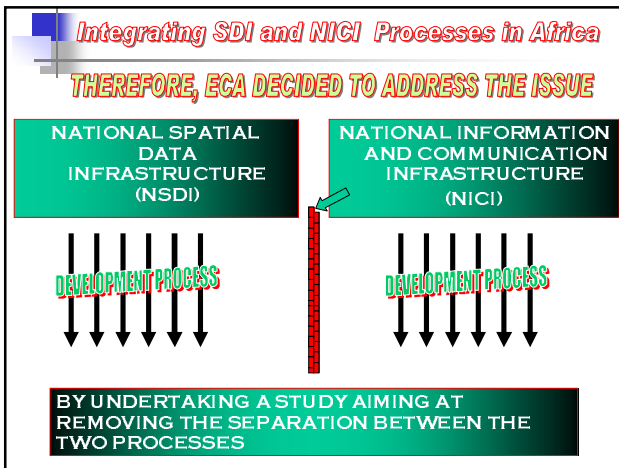
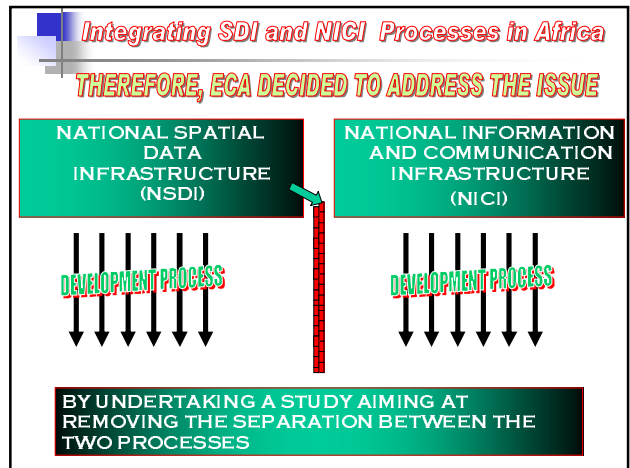
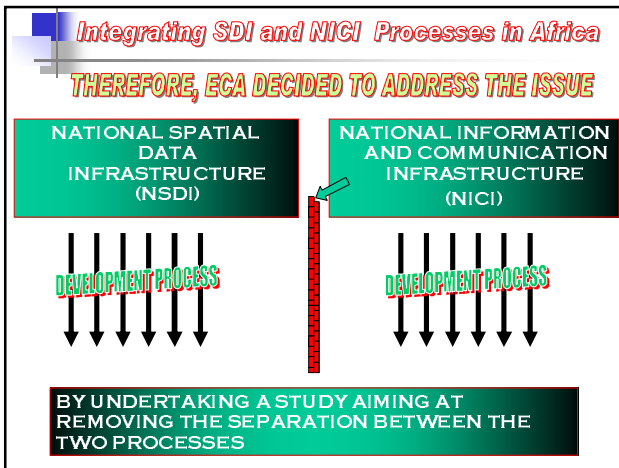
NATIONAL INFORMATION AND COMMUNICATION INFRASTRUCTURE (NICI)

ARE THE TWO SIDES OF THE SAME COIN FOR THE IMPLEMENTATION OF THE AFRICAN INFORMATION SOCIETY INITIATIVE (AISI)









Integrating SDI and NICI Processes in Africa

1. WHAT IS THE ISSUE ?

2. WHAT ARE THE MAIN FINDINGS OF THE STUDY ?

3. WHAT ARE THE CONCLUSION AND RECOMMENDATIONS ?

4. WHAT NEXT ?

Integrating SDI and NICI Processes in Africa

- A LOT OF EFFORTS HAVE BEEN DEPLOYED SINCE THE MID-NINETIES, ESPECIALLY BY ECA

– TO RAISE AFRICAN COUNTRIES AWARENESS OF SDI AND ICTS POTENTIAL FOR THEIR ECONOMIC DEVELOPMENT

– TO BUILD THEIR CAPACITY AND ASSIST THEM IN SDI DEVELOPMENT AND ICT POLICIES FORMULATION

– TO INITIATE ICT-BASED DEVELOPMENT ACTIONS AT LOCAL AS WELL AS REGIONAL LEVELS (VICI AND RICI RESPECTIVELY)

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HOWEVER,

- PROGRESS TOWARDS THE AISI TARGET FOR 2010 IS AT SLOW PACE (AS OF DECEMBER 2004, A GROUP OF 14 COUNTRIES - 26% OF AFRICA - WERE NOT YET ENGAGED IN ICT POLICY DEVELOPMENT)
- A SIGNIFICANT IMBALANCE EXISTS BETWEEN THE LEVEL OF ICT PENETRATION INTO THE VARIOUS SECTORS OF ECONOMIC DEVELOPMENT, AND THE LEVEL TO WHICH GEOINFORMATION IS APPLIED IN THE SAME SECTORS.
- THERE IS A LACK OF CONNECTION BETWEEN THE NICI IMPLEMENTATION STRATEGY AND THE SDI DEVELOPMENT APPROACH APPLIED SO FAR (EXCEPT IN A COUNTRY SUCH AS RWANDA)

Integrating SDI and NICI Processes in Africa

THIS COULD LEAD TO :

- A COLLECTIVE FAILURE TO MEET THE AISI TARGET FOR 2010 AND THE MDGs
- AN INCOMPLETE USE OF ICTs OVERALL POTENTIAL FOR ECONOMIC GROWTH, DUE TO THE LACK OF GEOINFORMATION CONTRIBUTION IN THE KEY OPPORTUNITY AREAS IDENTIFIED FOR E-STRATEGIES .
- A LACK OF PERFORMANCE IN SDI DEVELOPMENT, DUE TO A PERSISTENT LACK OF CASH FLOW FOR FUNDING SDIs IN AFRICA

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Integrating SDI and NICI Processes in Africa

SOLUTION SUGGESTED :

- TO STOP THE PARALLEL DEVELOPMENT OF SDIs AND NICIs IN AFRICA (INCLUDING VICIs & RICIs/ LOCAL & REGIONAL SDIs)
- AND
- TO START IMMEDIATELY TO APPLY A COORDINATED SDI/NICI DEVELOPMENT STRATEGY INTEGRATING THE TWO PROCESSES

Integrating SDI and NICI Processes in Africa

THREE REASONS TO MOVE INTO THE SDI/NICI INTEGRATION PROCESS :

- A **NATURAL REASON** : SDI IS AN INTEGRAL COMPONENT OF THE NATIONAL INFORMATION INFRASTRUCTURE (NII) (AS ENVISIONED BACK IN 1992 BY THE CLINTON ADMINISTRATION IN THE US)
- A **STRATEGIC REASON** : NEED TO ACHIEVE A HARMONIZED CONTRIBUTION OF BOTH GI AND ICTs IN THE EMERGENCE OF THE AIS (WITH AN ECONOMY OF SCALE IN PROCUREMENT, CAPACITY BUILDING, eSTRATEGIES MODELING, ETC.)
- A **FINANCIAL REASON** : IN THE PRESENT CONTEXT, SELLING SDI AS COMPONENT OF AN ICT PACKAGE SHOULD FACILITATE THE MOBILIZATION OF FUNDING .

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TWO SOLUTION OPTIONS IDENTIFIED :

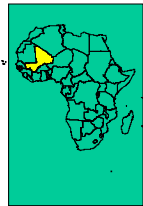
- A **SOFT SOLUTION** : MAINTAINING BOTH SDI AND NICI STRUCTURES AT COUNTRY LEVEL AND BUILDING FUNCTIONAL RELATIONSHIPS BETWEEN THEM;
- A **HARD SOLUTION** : CONSISTING OF DEVELOPING AND IMPLEMENTING A COMMON SDI/NICI STRATEGY, POLICY AND PLAN, BY MAINSTREAMING GI INTO THE E-GOVERNMENT AREAS (G2G, G2B, G2C)

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IN OPERATIONAL TERMS THE SOLUTION ENTAILS A DOUBLE LAYER APPROACH :



A COMMONLY APPLICABLE ACTION LAYER



A COUNTRY-SPECIFIC APPLICABLE ACTION LAYER

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THE COMMONLY APPLICABLE ACTION LAYER CONSISTS OF

- A REFOCUSSED ATTENTION ON THE CONCEPT OF "INFORMATION FOR DEVELOPMENT" AS A POWERFUL ENABLER IN SYNERGY BUILDING BETWEEN THE GI AND THE ICT COMMUNITIES
- ADOPTION OF THE "AFFORD APPROACH" FOR SDI PLANS DEVELOPMENT SIMILARLY TO AND IN COLLABORATION WITH THE "SUNRISE" MODEL FOR NICI PLAN DEVELOPMENT
- THE ESTABLISHMENT OF A POLICY DIALOGUE BETWEEN THE LEADERS OF THE GEOINFORMATION AND ICT COMMUNITIES

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THE COUNTRY-SPECIFIC APPLICABLE ACTION LAYER CONSISTS OF

- UNDERTAKING AN INITIAL INTEGRATION STUDY
- DEVELOPING AN SDI/NICI INTEGRATION PLAN,

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THE COUNTRY-SPECIFIC COMPONENT WILL BE APPLIED ACCORDING TO ONE OF THE FOLLOWING 4 SCENARIOS :

- THE **DUAL INITIATION SCENARIO** : WHEN NEITHER NICI, NOR SDI HAS BEEN INITIATED . AMONG OTHERS, A NATIONAL SDI SUB-COMMITTEE SHOULD BE SET UP AS AN ORGAN OF THE NATIONAL ICT COMMITTEE
- THE **DUAL REVISION SCENARIO** : WHEN SDI DEVELOPMENT PLAN AND NICI PLAN HAVE BEEN COMPLETED FOLLOWING TWO INDEPENDENT PROCESSES.

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- THE **NICI CORRECTION SCENARIO** : IN THIS CASE A NICI POLICY IS AVAILABLE, BUT WITHOUT A GEOINFO COMPONENT, AND AN SDI DEVELOPMENT PLAN IS NOT YET AVAILABLE. THE NICI STRATEGY, POLICY, AND PLAN MUST BE CORRECTED, AS WELL AS THE NICI STRUCTURE PUT IN PLACE, TO ACCOMMODATE THE SDI.
- THE **SDI LEADING SCENARIO** : THIS SCENARIO CORRESPONDS TO THE AVAILABILITY OF AN SDI PLAN DEVELOPED AHEAD OF THE NICI STRATEGY (THE LATTER NOT YET FORMULATED) . IN THIS CASE THE SDI DEVELOPMENT PLAN MUST BE PROVIDED TO THE NICI TEAM TO BE TAKEN INTO ACCOUNT DURING THE NICI FRAMEWORK, POLICY AND PLAN FORMULATION .

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FOR THE SUB-REGIONAL LEVEL :

- EARLY TALKS SHOULD TAKE PLACE BETWEEN THE EXPERTS (GEO AND ICT) SO THAT THEY DEVELOP A COMMON STRATEGY FOR THE FORMULATION OF A GEO-ENABLED REGIONAL NICI STRATEGY, POLICY AND PLAN, BASED ON THE PRINCIPLES APPLICABLE TO THE NATIONAL LEVEL.
- THE OPPORTUNITY SHOULD BE TAKEN TO SENSITIZE THE CONCERNED COUNTRIES ON SDI/NICI INTEGRATION AT NATIONAL LEVEL.

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1. WE EXPECT THAT YOU WILL HELP IMPROVE THE QUALITY OF POLICY DECISIONS TO BE TAKEN BASED ON THE FINDINGS OF THIS STUDY ; THEREFORE YOUR INPUTS ARE MOST WELCOME

2. THE SAME IS EXPECTED FROM THE CODI MEETING STARTING NEXT WEEK IN ADDIS ABABA

3. ONCE A CONSENSUS IS ACHIEVED, ECA WILL MOBILIZE RESOURCES TO ASSIST COUNTRIES AND SUB-REGIONS IN UNDERTAKING SDI/NICI INTEGRATION PROGRAMS

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IN CONCLUSION

WITH THE PERSPECTIVE OF INTEGRATING THE SDI AND THE NICI DEVELOPMENT PROCESSES,

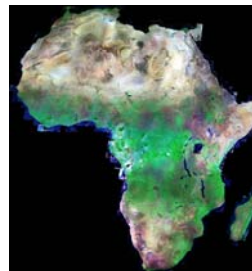
A BETTER FUTURE SHOULD BE IN VIEW FOR AFRICA

PARTICULARLY BECAUSE

- THE EXISTING SURVEYING AND MAPPING INFRASTRUCTURE WILL BE PAID ATTENTION TO, AS A KEY SOURCE OF FRAMEWORK DATA
- THE NICI WILL GROW IN QUALITY, CONTENT , AND SCOPE , BECAUSE OF THE MAINSTREAMING OF GI INTO THE VARIOUS E-GOVERNMENT SECTORS.

Integrating SDI and NICI Processes in Africa

INDEED WE SEE A WIDE RANGE OF APPLICATION AREAS WITH INTEGRATED SDI/NICI DEVELOPMENT. TWO EXAMPLES TO ILLUSTRATE :



ARE WE READY IN AFRICA FOR EARLY WARNING OF TSUNAMI THREATS ?

• CELLPHONE-BASED NAVIGATION



ARE WE READY IN AFRICA FOR GEO-ENABLED MOBILE TELEPHONY ?

THANK YOU FOR YOUR ATTENTION

STEPS IN THE **AFFORD APPROACH**

- A** SSESSMENT OF THE STATE OF SDI DEVELOPMENT
- F** EDERATION AND CONVERGENCE OF ORGANIZATIONAL EFFORTS IN GI MANAGEMENT
- F** ORMULATION AND ADOPTION OF A GI POLICY AND A PHASED SDI DEVELOPMENT PLAN,
- O** R GANIZATION FOR RESOURCES MOBILIZATION, AND
- D** EPLOYMENT OF THE GI POTENTIAL