



Space Data Coordination Group Meeting (SDCG-9)

22nd-26th February 2016, ESA/ESRIN, Frascati, Italy *Meeting Objectives*

The SDCG-9 meeting will be structured around the outcomes and tasks defined in the **group's 3-Year (2015-2017) Work Plan**. It will be co-located with the 2016 GFOI Open Forum (http://www.gfoi.org/2016-gfoi-plenary-and-open-forum/), which will bring together the leadership, components, and key stakeholders of the GFOI community, and presents an opportunity for broad cooperation and coordination across all efforts. The following are the objectives for SDCG-9:

- Take the opportunity of the whole of GFOI community meeting to interact
 with GFOI leadership and the new Programme Office, across the
 components, as well as with stakeholders such as The World Bank. Discuss
 the impact of the Paris Agreement on GFOI and its Space Data Coordination
 component.
- 2. Revisit the status of tasks and outcomes from the **SDCG 3-Year (2015-2017) Work Plan** across the four main work threads: baseline observations, GFOI Space Data Services, R&D, and GFOI Component Coordination and Country Engagement.
- 3. Confirm progress and evolution of the **Work Plan**, as well as the **evolution of** the plan for 2016-2018.
- 4. Review the implementation and status of the **Global Baseline Strategy**, and assess required updates to reflect new data streams.
- 5. Discussion of a mature draft of the **Global Data Flows Study**, and agreement of a plan for finalisation. Expose the results to the GFOI Open Forum and seek feedback and suggestions.
- 6. Review and progress the **implementation of the Space Data Services**, including the SDMS, SEPAL, and the Kenya and Colombian pilot Data Cube efforts. Launch the **Space Data Portal** and initiate feedback from user countries.
- 7. Discuss early outcomes and planning for 2016 from the new **GFOI R&D** governance arrangements, interactions with GOFC-GOLD and research teams, and Element 3 acquisition strategy status and way forward.
- 8. Confirm progress towards **integration with the MGD**, including MGD 2.0 and the web portal.
- 9. Confirm status of interaction with **SilvaCarbon and FAO** on country interaction, and overall component coordination and support. Review the proposed coordinated component plans and outcomes for 2016-17 and confirm the SDCG role, and the plans for the related engagement of countries in particular.
- 10. Confirm revisions to the SDCG 3-Year (2016-2018) Work Plan.
- 11. During a **joint session with LSI-VC**, discuss common themes across the groups, e.g. including next generation data distribution architectures, and Analysis Ready Data.
- 12. Prepare required SDCG inputs for CEOS SIT-31.

Week at a Glance

Monday 22nd AM: 10:30 - 12 noon - SDCG EXEC

PM: SDCG-LSI-VC Joint Meeting

Tuesday 23rd GFOI Open Forum Wednesday 24th GFOI Open Forum

Thursday 25th SDCG-9 sessions with other GFOI Open Forum participants

Friday 26th SDCG-9 sessions, conclusion and SDCG EXEC meeting

Logistics and Social

Monday PM Ice Breaker reception at ESRIN immediately following

close of business, 17:30 - 18:30

Tuesday PM No-host GFOI dinner at 20:00, Ara Anua Frascati (30 EUR)

Thursday PM No-host SDCG dinner at time and location TBA

Bus Information - departing from Piazza di Roma in Frascati (see sign Via Catone

Monday 08:15 to ESRIN

18:45 to Frascati (following social)

Tuesday 08:30 to ESRIN

17:30 to Frascati

Wednesday 08:30 to ESRIN

17:30 to Frascati

Thursday 08:30 to ESRIN

18:00 to Frascati

Friday 08:30 to ESRIN

No return to Frascati





Adjourn

Monday 22nd February Space Data Coordination Group for GFOI - SDCG-9



Location: ESA/ESRIN

EXEC: Room G

Joint SDCG - LSI-VC: Magellan

	SDCG EXEC Meeting (EXEC, SEC, and SEO only)		90	10:30	12:00		
Sessi	on 1: Joint Discussions between SDCG and LSI-VC		Session Ch	nairs: LSI	-VC Co-C	Chairs, SDCG EXEC	
Sess	Session 1 Objective:						
11. L	11. During a joint session with LSI-VC, discuss common themes across the groups, e.g. including next generation data distribution architectures,						
and.	Analysis Ready Data.						
#	Item	Presenter(s)	Duration	Start	End	Notes	
	LSI-VC to furnish agenda		120	13:00	15:00		
	Break		30	15:00	15:30		
	LSI-VC to furnish agenda		120	15:30	17:30		

17:30

 Icebreaker Social at ESRIN
 60
 17:30
 18:30

 Bus to Frascati
 18:45



Wednesday 24th February Space Data Coordination Group for GFOI - Plenary



<u>Location: ESA/ESRIN</u> <u>Magellan</u>

Space Data Component Presentation to Plenary

Accessing and Analysing Space Data 11:20-13:00

Obiectives:

- 1. Promote awareness of the space data deliverables and support available through GFOI
- 2. Take the opportunity to solicit feedback and engage new stakeholders in reviewing and applying these deliverables
- 3. Promote increased cooperation among GFOI partners on information system efforts

#	_ltem	Presenter(s)	Duration	Start	End	Notes
1	Introduction and overview of the Space Data	S Briggs (ESA/ CEOS Lead	10	11:20	11:30	
	component heritage and outputs	for GFOI)				
2	Space Data Services and Natioal Pilots	B Killough (NASA)	10	11:30	11:40	
3	Space Data Portal	S Ward (SDCG SEC)	5	11:40	11:45	
4	Future directions, inc. Global Data Flows	G Fosnight (USGS)	10	11:45	11:55	
5	Open Foris and SEPAL	A Pekkarinen	10	11:55	12:05	
6	ESA Forestry TEP	T Häme (VTT)	10	12:05	12:15	
7	Copernicus capabilities and requirements capture	J Yagüe (GMV)	10	12:15	12:25	
8	GFW: Cooperation with DigitalGlobe and Urthecast	F Stolle (WRI)	10	12:25	12:35	
9	Discussion		25	12:35	13:00	



Thursday 25th February Space Data Coordination Group for GFOI - SDCG-9



Location: ESA/ESRIN
Meeting Room: Cook

Registration / Arrival 30 8:30 9:00

Thursday's Objective:

1. Take the opportunity of the whole of GFOI community meeting to interact with GFOI leadership and the new Programme Office, across the components, as well as with stakeholders such as The World Bank. Discuss the impact of the Paris Agreement on GFOI and its Space Data Coordination component.

Session 2: GEOI Space Data Services

Session Chairs: B Killough

Session 2 Objective:

- 6. Review and progress the implementation of the Space Data Services, including the SDMS, SEPAL, and the Kenya and Colombian pilot Data Cube efforts. Launch the Space Data Portal and initiate feedback from user countries.
- Could be opened up for countries at the GFOI Open Forum and turned into an information system for them on the Space Data Services?
- Kenya (TBC) and/or Colombia (TBC) may be invited to present a summary of their Data Cube interactions either in Session 5 or Session 6.

#	Item	Presenter(s)	Duration	Start	End Notes
1	Session Overview	B Killough	10	9:00	9:10
	- Status Overview of 3-Year Work Plan Tasks and Outcomes				
2	Pilot implementation of the Space Data Services	B Killough	20	9:10	9:30
	- Data Cube and support to Kenya and Colombia				
	- Links to Global Data Flows				
	- Space Data Portal				
3	Space Data Services Discussion	All	60	9:30	10:30
	Break		15	10:30	10:45

Session 3: Baseline Global Observation Scenario

Session Chairs: FM Seifert, E Fosnight

Session 3 Objective:

- Review the implementation and status of the Global Baseline Strategy, and assess required updates to reflect new data streams.
- To discussion issues of mutual interest with the Sentinel Mission Managers.

#	Item	Presenter(s)	Duration	Start	End	Notes
4	SDCG-9 Meeting Introduction and Objectives	E Fosnight, FM Seifert	15	10:45	11:00	
	- Agenda overview					
5	Session Overview	E Fosnight	15	11:00	11:15	
	- Status Overview of 3-Year Work Plan Tasks and Outcomes					
	- Brief Landsat status update					
6	Session with Sentinel Mission Managers	J Roeder, B Hoersch	45	11:15	12:00	
	- Johannes Roeder (S-1 Planner)					
	- Bianca Hörsch (S-2 Mission Manager)					
7	Discussion	All	20	12:00	12:20	
8	CBERS-4 Update	D Valeriano	5	12:20	12:25	
9	ISRO Activites Related to Forest Monitoring	B Bhattacharya	5	12:25	12:30	
	Lunch		60	12:30	13:30	

Session 4: Global Data Flows Study

Session Chairs: E Fosnight

- Session 4 Objective:
- 4. Review the implementation and status of the Global Baseline Strategy, and assess required updates to reflect new data streams.
- 5. Discussion of a mature draft of the Global Data Flows Study, and agreement of a plan for finalisation. Expose the results to the GFOI Open Forum and seek feedback and suggestions.
- 8. Confirm progress towards integration with the MGD, including MGD 2.0 and the web portal.
- This session will include a joint session with the MGD component.

#	Item	Presenter(s)	Duration	Start	End	Notes
10	Status of Global Data Flows Study	E Fosnight, FM Seifert	10	13:30	13:40	Joint with Carly 13:30-14:30
11	Joint Discussion with Carly Green / MGD component	All	50	13:40	14:30	
	- Brief discussion at the end on MDG Annex B (satellite					
	information) updates and feedback					
12	Next Steps Towards Conclusion of Study	All	30	14:30	15:00	
Sessi	on 5: Space Data Country Outreach and Delivery	Session Chairs: S Ward, S	Wilson			
Sessi	on 5 Objective:					
- Con	nmunicate GFOI Space Data offerings to other components and	countries at the GFOI Ope	en Forum.			
- 90 r	ninute session to be promoted to all GFOI Open Forum particip	ants.				
13	Session Overview	S Wilson	15	15:00	15:15	

14	Space Data Strategy Overview	S Ward	15	15:15	15:30
	- Baseline strategy, R&D support				
	- Space Data Portal				
	Break		15	15:30	15:45
15	Space Data Services	B Killough	25	15:45	16:10
16	Discussion on Space Data Needs	Moderator:	40	16:10	16:50
	- Country inputs	- E Fosnight, FM Seifert			
Sess	on 6: Capacity Building and Country Engagement	Session Chairs: S Wilson, S	Ward		

Session 6 Objective:

- 9. Confirm status of interaction with SilvaCarbon and FAO on country interaction, and overall component coordination and support. Review the proposed coordinated component plans and outcomes for 2016-17 and confirm the SDCG role, and the plans for the related engagement of countries in particular.
- This session will include a joint session with the Capacity Building component (TBC) and the GFOI Office (TBC), and is focued on the *GFOI Component Coordination and Country Engagement* work stream in the SDCG 3-Year Work Plan.
- Objectives in the 3-Year Work Plan for this work stream include: delivery of a coherent customer experience for GFOI countries; space data support and services provided to all priority countries; and, effective management of country interfaces.
- SilvaCarbon (TBC), FAO (TBC), and countries (TBC).

#	Item	Presenter(s)	Duration	Start	End	Notes
17	Session Overview	S Wilson	10	16:50	17:00	
	- Status Overview of 3-Year Work Plan Tasks and Outcomes					
18	GFOI Office Update	T Harvey	10	17:00	17:10	
19	JAXA-JICA Collaboration	M Shimada	10	17:10	17:20	
20	Joint Discussion with Sylvia Wilson / CB component	All (S Ward moderator)	15	17:20	17:35	
	- GFOI Leads country engagement priorities					
Sessi	on 7: Closing	Session Chairs: G Dyke				
#	Item	Presenter(s)	Duration	Start	End	Notes
21	Summary of Main Discussion Points and Closing Remarks	E Fosnight, FM Seifert	10	17:35	17:45	
	Adjourn			17:45		

SDCG Social Dinner in Frascati (TBA)



Friday 26th February Space Data Coordination Group for GFOI - SDCG-9



Location: ESA/ESRIN
Meeting Room: Cook

Registration / Arrival 30 8:30 9:00

Friday's Objective:

- Discuss SDCG support to GFOI R&D component
- Focus on SDCG business

Session 8: Support to GFOI R&D

Session Chairs: A Rosenqvist, N Fujimoto

Session 8 Objective:

7. Discuss early outcomes and planning for 2016 from the new GFOI R&D governance arrangements, interactions with GOFC-GOLD and research teams, and Element 3 acquisition strategy status and way forward.

- This session will be joint with the GFOI R&D component.

#	Item	Presenter(s)	Duration	Start	End	Notes
22	Session Overview	A Rosenqvist, B Mora, N	15	9:00	9:15	Notes
	- Status Overview of 3-Year Work Plan Tasks and Outcomes	Fujimoto				
	- Overall status of GFOI R&D Coordination and Resources					
	- Data provision for GFOI R&D activities					
23	Agency Update since SDCG-8 - Summary of written input from	A Rosenqvist	20	9:15	9:35	
	agencies (DLR, CSA, ASI, JAXA, CNES)					
	- TerraSAR					
	- Pleiades imagery over the GFOI R&D sites					
	- Congo Basin Initiative					
24	Follow-up on SDCG-8 Data Supply from Commercial Providers	A Rosenqvist, B Mora	10	9:35	9:45	
	Discussions					
25	Discussion	All	45	9:45	10:30	
	- Data provision for GFOI R&D					
	- Synchronized/coordinated AO's from SDCG Element 3 agencies					
	- Next Steps					
	Break		15	10:30	10:45	

Session 9: SDCG Business and SDCG-9 Wrap-Up Discussions

Session Chair: S Ward

Session 9 Objective:

2. Revisit the status of tasks and outcomes from the SDCG 3-Year (2015-2017) Work Plan across the four main work threads: baseline observations, GFOI Space Data Services, R&D, and GFOI Component Coordination and Country Engagement.

- 3. Confirm progress and evolution of the Work Plan, as well as the evolution of the plan for 2016-2018.
- 10. Confirm revisions to the SDCG 3-Year (2016-2018) Work Plan.
- 12. Prepare required SDCG inputs for CEOS SIT-31.

#	_ltem	Presenter(s)	Duration	Start	End	Notes
26	Update to SDCG 3-Year Work Plan	G. Dyke	30	10:45	11:15	
	- Status of outcomes					
	- Update for 2016-2018					
27	SDCG Reporting to CEOS SIT-31	SDCG SEC	20	11:15	11:35	
28	SDCG-10 venue and timing proposal	SDCG SEC	15	11:35	11:50	
29	Outlook for SDCG SEC Funding	SDCG SEC	10	11:50	12:00	
30	Review of Actions	SDCG SEC	20	12:00	12:20	
31	Closing Remarks	E Fosnight, FM Seifert	10	12:20	12:30	
	SDCG-9 Adjourn			12:30		
	Lunch		75	12:30	13:45	

	SDCG Exec meeting				
32	SDCG EXEC Meeting	SDCG EXEC, SEC, and SEO	90	13:45	15:15
	SDCG EXEC Adjourn			15:15	





SDCG 3-Year Work Plan Outcomes for 2015 - 2017

Baseline Global Data Acquisitions

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	Global coverage with consistent information products	Efficient and effective global flows of data	Multiple annual global coverages by 2016 of the world's forested areas	Outcome
(e.g. ongoing evolution of the Landsat product roadmap towards surface reflectance, development of Sentinel-2 surface reflectance products)	Identify Space Agency and expert partner information product initiatives relevant to GFOI and MDG	Complete global data flow study in cooperation with USGS, ESA/EC and SDCG Exec	Building to a total of 67 countries in line with the Global Baseline Data Acquisition Strategy Engage Sentinel-2A mission planners during the ramp-up phase	2015
	Inclusion of GFOI requirements in agency data-related initiatives	Implement processes and tools for efficient and effective global flows of data	Multiple global annual coverages of the world's forested areas from a suite of core mission sensors	2016
	Integrate flows of information products as they become available	Efficient and effective global flows of data for development of GFOI standard products	Multiple global annual coverages of the world's forested areas by several core mission sensors	2017





GFOI Space Data Services

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Assembly & delivery of core data streams	Interoperable satellite data discovery tools	Ensured on-going coverage	A program of space data capacity building meetings	Outcome Space Data Services closely integrated with new MGD and SilvaCarbon activities
Work with priority countries to try and address their data assembly and delivery needs	Work with core data stream providers to define discovery tools required, and study archive interoperability challenges	Archive characterisation support and on-going coverage support provided for countries attending 2015 meetings	Further workshops at SDCG and SilvaCarbon events with country prioritisation defined by agreement with SilvaCarbon, FAO, and World Bank and endorsed by the GFOI Lead Team	2015 Definition of approach with FAO, World Bank, and SilvaCarbon on tools and service delivery and mainstreaming Establish integration of Space Data Services with new interactive MGD
Assembly & delivery of core data streams emphasizing direct download	Implementation of interoperable data discovery tools including Landsat, Sentinel-1 and -2, CBERS	Archive characterisation support and on-going coverage support provided for countries attending 2016 meetings	Continued meetings with priority countries	2016 Implementation of service delivery in coordination with FAO, World Bank, and SilvaCarbon
Assembly & delivery of core data streams emphasizing direct download	Interoperable satellite data discovery tools for all core data streams	Ensured on-going coverage for priority countries with semi-automated tools for archive characterisation	Space data meetings including national space data needs assessments for all priority countries	2017 Close integration with MGD and SilvaCarbon components, FAO and World Bank





11	10	9
Creation of a model national GFOI cloud computing search, storage and processing system	Conclude pilots investigating fundamental issues around the provision of cloud computing	Outcome Integration of space data within the GFOI Methods and Guidance
Kenya national Data Cube project accelerated for COP-21 Initiate within the ESA Forestry TEP a demonstration of a subnational system for Mexico	Study strategic issues related to cloud computing-based MRV support Closer collaboration between SDCG and FAO on SDMS Consideration of potential of GFW 2.0 and Data Cube approaches	2015 SDCG-7 discussion on interaction between MGD v2.0 and the SDCG tools and services
Kenya Data Cube and SDMS concluded ESA Forestry TEP demonstration of a sub-national system for Mexico underway	Develop pilots investigating fundamental issues around the provision of cloud computing Further work on SDMS	2016 Finalisation of methodology to derive GFOI standard products using space data and reflection in the MGD. Operational links to space data in MGD Portal
Goal of model national systems building on the experience of the pilots with Data Cube, SDMS and ESA TEP	Conclude pilots investigating fundamental issues around the provision of cloud computing	Integration of space data within the GFOI Methods and Guidance Portal, including agreement on the derivation of GFOI standard products using space data





Space Data Support to GFOI Research & Development (Element 3)

14	13	12
Development of private sector engagement & SDCG mechanism for brokering space data requests in support of GFOI R&D activities	Providing the satellite data required to progress the GFOI priority R&D topics	Outcome Development and updates of the Element-3 strategy document
Development of a private sector cooperation strategy in the area of Space Data for GFOI R&D activities Development of an SDCG mechanism for brokering space data requests in support of GFOI R&D activities Commercial data provider information workshop in conjunction with SDCG-8	Dedicated satellite data acquisitions over R&D Study Sites Distribution of data to the GFOI R&D Study teams	2015 Finalise the Element 3 acquisition strategy in support of the GFOI R&D Plan. Penultimate draft by SDCG-7. Endorsement of final document at SIT-30
Implement private sector cooperation strategy in the area of Space Data for R&D activities Implement space data requests brokering system for SDCG and promote its use.	Coordinate contacts and communications between SDCG data stream providers and GFOI research groups Acquisitions and distribution of satellite data	First update of the Element 3 strategy document to reflect progress of the GFOI R&D Component, status of engagement of SDCG data stream providers. To be completed prior to SIT-31 for endorsement.
Implement private sector cooperation strategy in the area of Space Data for R&D activities Implement space data requests brokering system for SDCG and promote its use.	Acquisitions and distribution of satellite data	2017 Annual update of document as required





GFOI Component Coordination and Country Engagement

17	16	15
Effective management of country interfaces	Space data support and services provided to all priority countries	Outcome Delivery of a coherent customer experience for GFOI countries
Development of simple Excelbased database for internal SDCG purposes Establish <i>modus operandi</i> in collaboration with FAO and GFOI Lead Team for country engagement	FAO and SilvaCarbon will help define the priority countries for GFOI support and deliverables	Coordinated plan for providing the most efficient provision of GFOI deliverables to countries – developed by the Space Data, MGD and Capacity Building Component Leads
Transition to GFOI Office as appropriate	As dictated by the country prioritisation above, in collaboration with FAO, World Bank, SilvaCarbon, and GFOI Lead Team	2016 Effective coordination among GFOI Components for engaging and supporting follow-up with priority countries
Effective management of country interfaces in coordination with FAO and SilvaCarbon via a country relationship database	Capacity to provide space data support and services to all priority countries	Effective coordination among GFOI Components for engaging and supporting follow-up with priority countries