



Government of India

**R F D**

(Results-Framework Document)  
for

Education and Research Network (ERNET)  
(2013-2014)

## Section 1: Vision, Mission, Objectives and Functions

### Vision

To advance Indian Research and Education by operating and developing world class Networks, Applications and Services.

### Mission

Provide Network Infrastructure Services and Connectivity addressing the requirement of India's Research and Education sector facilitating them to become increasingly efficient and effective in their chosen field. Undertaking cutting edge Research and Development in Networking and its Applications and also development of Human Resources in Networking.

### Objectives

- 1 Operations of National Academic and Research Network: Providing a world class reliable, robust and state-of-the-art Network Services to Academic and Research institutions of the country.
- 2 Research and Development in the area of Data Communications and its applications.
- 3 Human Resource Development in the area of Networking.
- 4 To provide consultancy and implementation of ICT Projects for target Users.

### Functions

- 1 Providing state-of-the-art Network Services to Academic and Research institutions, Govt. organizations, NGOs, private sector R&D organizations, and various other non-commercial organizations, covering institutions in various sectors, viz., health, agriculture, higher education, schools, science & technology.
- 2 Research and Development in the area of data communications and its applications including setting up of test beds, generation of articles and papers.
- 3 Providing training to the persons in the area of ICT.
- 4 Executing ICT projects for target Users including campus-wide high speed local area networking.
- 5 To provide consultancy to educational and research institutions in setting up & operations of e-infrastructures.
- 6 All matters relating to personnel under the control of this office.

## Section 2: Inter se Priorities among Key Objectives, Success indicators and Targets

Objective	Weight	Action	Success Indicator	Unit	Weight	Target / Criteria Value				
						Excellent	Very Good	Good	Fair	Poor
						100%	90%	80%	70%	60%
[1] Operations of National Academic and Research Network: Providing a world class reliable, robust and state-of-the-art Network Services to Academic and Research institutions of the country.	45.00	[1.1] Establishment, operations and maintenance of communication infrastructure	[1.1.1] Net addition of Internet / Intranet links provided to various end user institutions spread throughout the country during the financial year.	Number	13.50	40	30	20	10	0
			[1.1.2] Availability of round the clock network services to end user institutions during the year.	Percentage	9.00	98	98	97	96	95
			[1.1.3] Revenue generated from the total number of end user institutions covered.	Rs. Crore	4.50	13	12.5	12.0	11	10
		[1.2] Services like web hosting, domain name registration, mail hosting, data hosting, video conferencing, etc	[1.2.1] Number of user institutions covered.	Number	13.50	15000	12000	9500	7000	4500
			[1.2.2] Revenue generated from the total number of end user institutions covered.	Rs. Lakhs	4.50	90	80	70	60	50
[2] Research and Development in the area of Data Communications and its applications.	25.00	[2.1] Initiation of new R&D projects in networking like MyFire, VSES for schools.	[2.1.1] Number of active projects initiated in networking	Number	7.50	6	5	4	3	2

## Section 2: Inter se Priorities among Key Objectives, Success indicators and Targets

Objective	Weight	Action	Success Indicator	Unit	Weight	Target / Criteria Value				
						Excellent	Very Good	Good	Fair	Poor
						100%	90%	80%	70%	60%
		[2.2] Creation of network test beds like 6LoWPAN, Mobile IPv6, eduroam, etc.	[2.2.1] Number of test beds established in a year	Number	6.25	5	4	3	2	1
		[2.3] Timely completion of R&D projects and Network test beds in the area of data communications and its applications	[2.3.1] Percentage of projects completed within time	Percentage	6.25	100	100	80	70	60
		[2.4] Generation of intellectual knowledge	[2.4.1] Number of articles / papers published in a year	Number	5.00	5	4	3	2	0
[3] Human Resource Development in the area of Networking.	10.00	[3.1] Conducting skill development training in networking	[3.1.1] Number of persons trained in a year.	Number	8.00	350	300	250	100	50
			[3.1.2] Revenue generated through persons trained in a year	Rs. Lakhs	2.00	13	10	7	5	3
[4] To provide consultancy and implementation of ICT Projects for target Users.	9.00	[4.1] Providing consultancy and implementing ICT projects for target user institutions	[4.1.1] Number of consultancy works and ICT projects implemented.	Number	3.60	14	13	12	10	8
			[4.1.2] Consultancy works and ICT Projects completed within allowed time	Percentage	2.70	100	100	80	70	60
			[4.1.3] Revenue generated from the consultancy works and ICT	Rs. Crore	2.70	34	30	26	22	20

## Section 2: Inter se Priorities among Key Objectives, Success indicators and Targets

Objective	Weight	Action	Success Indicator	Unit	Weight	Target / Criteria Value				
						Excellent	Very Good	Good	Fair	Poor
						100%	90%	80%	70%	60%
			projects implemented.							
* Efficient Functioning of the RFD System	3.00	Timely submission of Draft RFD (2013-14) for approval	On-time submission	Date	2.0	15/05/2013	16/05/2013	17/05/2013	20/05/2013	21/05/2013
		Timely submission of Results for RFD (2012-13)	On-time submission	Date	1.0	01/05/2013	02/05/2013	05/05/2013	06/05/2013	07/05/2013
* Administrative Reforms	4.00	Implement ISO 9001 as per the approved action plan.	% Implementation	%	2.0	100	95	90	85	80
		Prepare an action plan for Innovation	On time submission	Date	2.0	30/07/2013	10/08/2013	20/08/2013	30/08/2013	10/09/2013
* Improving Internal Efficiency /responsiveness / service delivery of Ministry / Department	4.00	Implementation of Sevottam	Independent Audit of Implementation of Citizen's Charter	%	2.0	100	95	90	85	80
			Independent Audit of implementation of public grievance redressal system	%	2.0	100	95	90	85	80

\* Mandatory Objective(s)

### Section 3: Trend Values of the Success Indicators

Objective	Action	Success Indicator	Unit	Actual Value for FY 11/12	Actual Value for FY 12/13	Target Value for FY 13/14	Projected Value for FY 14/15	Projected Value for FY 15/16
[1] Operations of National Academic and Research Network: Providing a world class reliable, robust and state-of-the-art Network Services to Academic and Research institutions of the country.	[1.1] Establishment, operations and maintenance of communication infrastructure	[1.1.1] Net addition of Internet / Intranet links provided to various end user institutions spread throughout the country during the financial year.	Number	-290	20	30	40	50
		[1.1.2] Availability of round the clock network services to end user institutions during the year.	Percentage	97	98	98	98	98
		[1.1.3] Revenue generated from the total number of end user institutions covered.	Rs. Crore	13.84	12.12	12.5	13	13.5
	[1.2] Services like web hosting, domain name registration, mail hosting, data hosting, video conferencing, etc	[1.2.1] Number of user institutions covered.	Number	7562	9848	12000	15000	19000
		[1.2.2] Revenue generated from the total number of end user institutions covered.	Rs. Lakhs	81	72	80	90	100
[2] Research and Development in the area of Data Communications and its applications.	[2.1] Initiation of new R&D projects in networking like MyFire, VSES for schools.	[2.1.1] Number of active projects initiated in networking	Number	5	4	5	6	6
	[2.2] Creation of network test beds like	[2.2.1] Number of test beds established in a	Number	2	3	4	5	6

### Section 3: Trend Values of the Success Indicators

Objective	Action	Success Indicator	Unit	Actual Value for FY 11/12	Actual Value for FY 12/13	Target Value for FY 13/14	Projected Value for FY 14/15	Projected Value for FY 15/16
	6LoWPAN, Mobile IPv6, eduroam, etc.	year						
	[2.3] Timely completion of R&D projects and Network test beds in the area of data communications and its applications	[2.3.1] Percentage of projects completed within time	Percentage	100	100	100	100	100
	[2.4] Generation of intellectual knowledge	[2.4.1] Number of articles / papers published in a year	Number	2	3	4	4	5
[3] Human Resource Development in the area of Networking.	[3.1] Conducting skill development training in networking	[3.1.1] Number of persons trained in a year.	Number	164	243	300	350	400
		[3.1.2] Revenue generated through persons trained in a year	Rs. Lakhs	5	7	10	13	16
[4] To provide consultancy and implementation of ICT Projects for target Users.	[4.1] Providing consultancy and implementing ICT projects for target user institutions	[4.1.1] Number of consultancy works and ICT projects implemented.	Number	11	12	13	14	15
		[4.1.2] Consultancy works and ICT Projects completed within allowed time	Percentage	100	100	100	100	100
		[4.1.3] Revenue generated from the consultancy works and ICT projects implemented.	Rs. Crore	32.45	26.14	30	34	38

\* Mandatory Objective(s)

### Section 3: Trend Values of the Success Indicators

Objective	Action	Success Indicator	Unit	Actual Value for FY 11/12	Actual Value for FY 12/13	Target Value for FY 13/14	Projected Value for FY 14/15	Projected Value for FY 15/16
* Efficient Functioning of the RFD System	Timely submission of Draft RFD (2013-14) for approval	On-time submission	Date	--	--	15/05/2013	--	--
	Timely submission of Results for RFD (2012-13)	On-time submission	Date	--	--	02/05/2013	--	--
* Administrative Reforms	Implement ISO 9001 as per the approved action plan.	% Implementation	%	--	--	95	--	--
	Prepare an action plan for Innovation	On time submission	Date	--	--	10/08/2013	--	--
* Improving Internal Efficiency /responsiveness / service delivery of Ministry / Department	Implementation of Sevottam	Independent Audit of Implementation of Citizen's Charter	%	--	--	95	--	--
		Independent Audit of implementation of public grievance redressal system	%	--	--	95	--	--

\* Mandatory Objective(s)



## Section 4: Acronym

Sl.No	Acronym	Description
1	None	NIL

## Section 4: Description and Definition of Success Indicators and Proposed Measurement Methodology

Sl.No	Success indicator	Description	Definition	Measurement	General Comments
1	[1.1.1] Net addition of Internet / Intranet links provided to various end user institutions spread throughout the country during the financial year.	ERNET network is a judicious mix of terrestrial and satellite based wide area network and provides both terrestrial and VSAT links for accessing Internet/Intranet related applications to end user institutions. End user institutions are academic and research institutions of the country and ERNET is capable to provide the links throughout the country.	Net increase in the number of user Institutions to whom an Internet/Intranet link is being provided through ERNET network.	Net addition of Internet/Intranet links provided to various institutions means number of new links established minus number of existing links discontinued in various end user institutions during the financial year	
2	[1.1.2] Availability of round the clock network services to end user institutions during the year.	Network services are being provided on 24 x 7 basis to end user institutions.	Uptime in a year in %	Total duration minus downtime is divided by the total duration and percentage is calculated	
3	[1.1.3] Revenue generated from the total number of end user institutions covered.	Amount of revenue generated from the total number of Internet/Intranet links in various end user institutions	Amount of Revenue generated from the total number of end user institutions provided with the connectivity during the year	Measured in crores of rupees during the financial year as given in the audited accounts	
4	[1.2.1] Number of user institutions covered.	Each User Institution to whom services such as web hosting, domain name registration, mail hosting, data hosting, etc is provided.	Total number of user institutions to whom these services are being provided.	Total number of user institutions to whom these services are being provided.	
5	[1.2.2] Revenue generated from the total number of end user institutions covered.	Amount of revenue generated from the total number of end user institutions covered by providing services such as web hosting, domain name registration, mail hosting etc.	Amount of revenue generated from the total number of end user institutions during the year.	Measured in lakhs of rupees during the financial year as given in the audited accounts	

## Section 4: Description and Definition of Success Indicators and Proposed Measurement Methodology

Sl.No	Success indicator	Description	Definition	Measurement	General Comments
6	[2.1.1] Number of active projects initiated in networking	Research and Development projects in the area of Data Communications, Networking and its applications will be considered like MyFire, VSES (cloud computing) for schools, etc.	Number of Research and Development projects active during the financial year	Total number of projects active/implemented during the financial year	
7	[2.2.1] Number of test beds established in a year	Number of test beds established in computer networking will be considered like 6LoWPAN, Mobile IPv6, eduroam, etc.	Number of test beds active during the financial year	Total Number of test beds active/ implemented during the financial year	
8	[2.3.1] Percentage of projects completed within time	Timely completed R&D projects and Network test beds in the area of data communications and its applications will be considered.	R&D projects and Network test beds in the area of data communications and its applications	Percentage of timely completed projects from the projects which are supposed to be completed during the financial year	
9	[2.4.1] Number of articles / papers published in a year	Articles / papers published using intellectual knowledge in the area of interest.	Number of articles / papers published in a year	Total numbers of articles and papers published during the financial year	
10	[3.1.1] Number of persons trained in a year.	Any person enrolled for any of the skill development training programme in networking	Number of persons trained in a year	Total Number of persons trained during the financial year directly or under any of the project will be considered.	
11	[3.1.2] Revenue generated through persons trained in a year	Amount of revenue generated from the training of persons directly or under any of the projects.	Amount of revenue generated from the training of persons.	Measured in lakhs of rupees during the financial year as given in the audited accounts	

## Section 4: Description and Definition of Success Indicators and Proposed Measurement Methodology

SI.No	Success indicator	Description	Definition	Measurement	General Comments
12	[4.1.1] Number of consultancy works and ICT projects implemented.	<p>Projects like:</p> <ul style="list-style-type: none"> <li>-Vocational Centres for Skill Creation for the Children with disabilities in the Area of Information Technology- Phase II.</li> <li>-E-linkage to the Farmers</li> <li>-Campus-wide LAN</li> <li>-ICT infrastructure creation at schools</li> </ul>	Projects done either through sponsorship from Govt. Departments or through MOU with user agencies or through competitive bidding.	Number of projects active during the financial year will be considered.	
13	[4.1.2] Consultancy works and ICT Projects completed within allowed time	Consultancy works and ICT projects completed within allowed time during the financial year will be considered.	Percentage of timely completed projects from the projects which are supposed to be completed during the financial year will be calculated.	Measured in percentage during the financial year	
14	[4.1.3] Revenue generated from the consultancy works and ICT projects implemented.	Amount of revenue generated from the consultancy works and ICT projects implemented as defined above.	Amount of revenue generated from the consultancy works and ICT projects implemented.	Measured in crores of rupees during the financial year as given in the audited accounts	

## Section 5 : Specific Performance Requirements from other Departments

Location Type	State	Organisation Type	Organisation Name	Relevant Success Indicator	What is your requirement from this organisation	Justification for this requirement	Please quantify your requirement from this Organisation	What happens if your requirement is not met.
Central Government		Departments	testorg	Net addition of Internet/ Intranet links provided to various end user institutions spread throughout the country during the financial year.	Department of Space - Subsidized INSAT space segment	To promote connectivity in the Govt. academic &&& research institutions/schools located in the remote areas of the country at affordable rates.	50%	Existing institutions connected through VSAT may also opt disconnection.
				Net addition of Internet/ Intranet links provided to various end user institutions spread throughout the country during the financial year.	DOT has revised Royalty fee from April 2012 for Captive VSAT Network. It may be reverted back to the previous rates or waived off for ERNET India.	To provide connectivity at affordable rates in the Government education & research institutions/schools located in the remote areas where other types of connectivity is not available.	100%	Existing institutions located in the remote areas will be forced to discontinue the VSAT links and will be deprived of connectivity.
State Government	All States	Other	Other	[4.1.1] Number of consultancy works and ICT projects implemented.	Timely handover of funds and basic infrastructure to establish the centres by the concerned departments.	Centres are housed in the premises of institutes, hence basic infrastructure like space and power supply is required from them to establish the ICT infrastructure. Funds are required to procure the items.		Implementation of the project will not be feasible in the absence of basic infrastructure and fund transfer.

## Section 6: Outcome/Impact of Department/Ministry

Outcome/Impact of Department/Ministry	Jointly responsible for influencing this outcome / impact with the following department (s) / ministry(ies)	Success Indicator	Unit	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16
1 Growth in Internet connectivity to educational Institutes/universities in the field of R&D/ Medical Health care/ Agriculture and Various Govt establishments leading to improved productivity/ efficiency.	Ministry of HRD, DeitY, Ministry of Agriculture, Ministry of Health & family welfare	Net addition of Internet/ Intranet links provided to various end user institutions spread throughout the country during the financial year.	Number	-290	20	30	40	50
2 Growth of services like web hosting, domain name registration, mail hosting, data hosting, video conferencing, etc	DeitY, Ministry of HRD, Ministry of Agriculture other Central and State Govt. departments	Number of user institutions covered	Number	7562	9848	12000	15000	19000
3 Promotion of IT/ITES services by providing consultancy service to State & Central Govt. departments / organizations.	DeitY, Dept of Finance & respective Central & State Govt. Ministry	Number of consultancy works and ICT projects	Number	11	12	13	14	15
4 Growth of Research and Development in the area of Data Communications and its applications	DeitY, International Collaboration	Number of active projects in networking	Number	5	4	5	6	6
5 Human Resource Development in the area of Networking	DeitY, MHRD, Ministry of Agriculture other central and State Govt. Departments	Number of persons trained in a year	Number	164	243	300	350	400