

GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
INDIAN SPACE RESEARCH ORGANISATION

Telephone: 27371  
Grams: ISRO

Cauvery Bhavan,  
Kempegowda Road,  
Bangalore 560 009

Ref: ISRO:SS:21/44G

October 9, 1984

ORDER

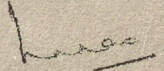
Subject: Establishment of NNRMS Regional Remote Sensing (Data Processing) Service Centres

1. Based on the decision made by the Planning Committee of the National Natural Resources Management System (PC-NNRMS), five Regional Remote Sensing (Data Processing) Service Centres are presently being set up. In order to progress the work relating to the establishment of these Centres, a Committee was set up by Secretary, DOS in October 1983 with Additional Secretary, DOS as the Chairman. Shri V L Swaminathan, Engineer 'SE', ISRO HQ was designated as Assistant Director (NNRMS Regional Remote Sensing (Data Processing) Service Centres) in the Earth Observation Systems Programme Office of ISRO/DOS in June 1984.
2. Subsequently, the PC-NNRMS in its fourth meeting decided on a centralised management for all the Regional Centres and it was decided that the common management system for all the five centres and subsequent centres that may be added to the System would be handled by DOS for an initial period of five years, and the details of running such a system will be worked out in consultation with the cooperating Departments/Ministries.
3. The immediate tasks emanating from the above are:
  - \* establishing of the Regional Centres to the point of providing reliable operational service,
  - \* making available the required operational software, necessary simulation and training in order to effect smooth transition to the operational phase, and
  - \* evolving policies and procedures for the operational phase.

These tasks must be completed by early 86 to end 86 (for the five centres) in order to utilise fully the IRS-1 spacecraft.

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4. To realise the above tasks, Shri K Radhakrishnan, Engineer 'SE', is appointed as Project Manager, RRSSC with immediate effect. This will be in addition to his other responsibilities at ISRO/DOS as Manager, BEA, ISRO/DOS etc.
5. The Committee referred to in para (1) above will continue to oversee and guide the above tasks concerning RRSSC.
6. Shri V L Swaminathan, in addition to his other responsibilities at EOS Programme Office will advise Project Manager, RRSSC on all software and data processing aspects.
7. Project Manager, RRSSC is authorised to deal directly with the respective focal points in other Institutions/Departments/Ministries for all executive/operational matters related to the establishment of the Regional Centres.
8. Project Manager, RRSSC shall immediately submit a detailed management plan, which must specifically address among other things, the composition of the core team, schedule and implementation aspects.
9. Seperate orders will issue regarding the delegation of financial powers to Project Manager, RRSSC.

  
(U. R. Rao)

Chairman, ISRO/Secretary, DOS

Distribution list to ORDER No. ISRO:SS:21/44G dated October 9, 1984

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1. Members, PC-NNRMS
2. Members of the RRSSC Committee
3. Secretary, DOE
4. Members, SWG-NNRMS
5. Members, ISRO Council
6. Director General, GSI
7. Director, IIT, Kharagpur
8. Dr Hirekerur, Director, NBSS & LUP
9. Dr N S Randhawa, DDG, ICAR
10. Director, CAZRI, Jodhpur
11. All State focal points
12. Associate Director, SAC
13. Chairman, RSA, SAC
14. Dr LRA Narayan, Assoc Director (NNRMS-SSS), NRSA
15. Dr Baldev Sahai, Assoc Director (NNRMS-SSS), SAC
16. Dr V R Rao, Dy Director (NNRMS-SSCO), ISRO HQ
17. Shri S Chandrashekar, Dy Director, EOS (Systems), ISRO HQ
18. Shri A R Dasgupta, Dy Director, IRS-UP & Dy Director (NRIS-IS)
19. Shri G Behera, Manager, User Services & Utilisation
20. Shri Jacob Ninan, Manager, Systems & Technology Development
21. Chief Engineer, CED, DOS
22. Dr K S Prabhu, ISRO HQ
23. Shri P Sudarsan, Director, BEA, ISRO/DOS
24. Head, PGA, ISRO HQ
25. Admn Officer-II, ISRO HQ
26. Accounts Officer-II, ISRO HQ
27. Under Secretary (V), DOS
28. EOS Scientists - circulation

Government of India  
Department of Space  
Indian Space Research Organisation  
Headquarters

Ref : 21/44-G

December 23, 1985

OFFICE ORDER

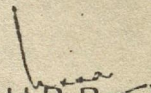
Consequent to the Government decision of February 1985 to establish the National Natural Resources Management System (NNRMS), the Department of Space (DOS) was designated as the nodal department of Government of India charged with the responsibility of establishing the NNRMS. Government also decided that DOS will speedily instal and initially manage, on behalf of the different funding organisation of the Government of India, a set of Regional Remote Sensing Service Centre (RRSSC) as service facilities for various users in the geographic region being served, and also a few other Centres as may be decided upon by the Planning Committee of National Natural Resources Management System (PC-NNRMS) subsequently. The first five centres, funded by the Department of Space, Department of Science & Technology, Department of Mines and the Indian Council of Agricultural Research are being set up at Bangalore, Dehra Dun, Jodhpur, Kharagpur and Nagpur.

2. Shri K Krishnan Unni, on deputation from the Geological Survey of India/Department of Mines to the Department of Space as Scientist/Engineer-SG, is designated as the Director, NNRMS-RRSSC until further orders. Director, NNRMS-RRSSC will be the Chief Executive of the NNRMS Regional Remote Sensing Service Centres and shall be responsible for the establishment and management of these Centres, under the guidelines laid down by DOS/ISRO under the overall supervision of Shri Y S Rajan, Secretary, PC-NNRMS.

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3. Director, NNRMS-RRSSC will also be responsible for providing necessary assistance and consultancy sought by the State Governments/Union Territories and other agencies for setting up facilities for Remote Sensing Data analysis and interpretation.
4. Shri K Radhakrishnan, Project Manager NNRMS-RRSSC will report to Director, NNRMS-RRSSC.
5. Orders delegating powers to Director, NNRMS-RRSSC and Project Manager, NNRMS-RRSSC will be issued separately.

This order will come into effect immediately.

  
( U R Rao )  
Chairman/ISRO &  
Secretary, DOS

Distribution

Ref : 21/44-G

Distribution

Shri YS Rajan  
Secretary, PC-NNRMS

Shri K Krishnanunni  
Director, NNRMS-RRSSC

Shri K Radhakrishnan  
Project Manager, NNRMS-RRSSC

cc to: Chairman & Members of PC-NNRMS

Convenor & Members of SWG

Members of ISRO Council

Director, VSSC / SAC / ISAC / SHAR / NRSA / PRL

Director, PPEG, VSSC

Head, PPEG, SAC / ISAC / SHAR / NRSA / PRL

Controller, VSSC / SAC / ISAC / SHAR

Director, LPSU / DECU / ISTRAC

Project Director, INSAT-1 SSPO

Chief Engineer, CED

Addl Secy, DOS

Joint Secy, DOS

Chief Controller of Accounts, DOS

US(V),DOS / US(K), DOS / US(A), DOS

Sr. Admn Officer, DOS / ADO(V), DOS / ADO(D), DOS

Scientific Secy, ISRO

Asst Sci Secy, ISRO

Director, SCPO / EOS / ICO

Prog Director, RAT

Director, ISO / Manager, ISO

Director, ISREL / Manager, ISREL

Director, BEA / Manager, BEA

Chairman, TTG / Manager, TTG

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Associate Directors, NNRMS-SSS  
Dy Director, EOS / NNRMS-SSCO / NNRMS-SSS / NNRMS-IS  
Head, P&GA, ISRO HQ / ADO-II, ISRO HQ  
Accounts Officer, ISRO HQ  
AAO, NNRMS / RRSSC-CMO / RRSSC(B)  
Admn Officer, ISRO Liaison Cell, Bombay  
ISRO Technical Liaison Officers, ITLU, Washington / Paris  
Associate Director, NRSA / Head, IIRS  
Director, IIT, Kharagpur  
Director, CAZRI, Jodhpur  
Director, NBSS&LUP, Nagpur  
Director General, GSI, Calcutta  
Sr Dy Director General, AMSE, GSI, Bangalore  
Director, RSAC-UP, Lucknow  
Director, IRS, Anna University  
Joint Secy / Financial Adviser, DST  
Asst Director General, ICAR

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Refer in Voice Recorder  
24/11/88 Helpy from in Trans

Full

Sub: RRSSC Management - roles and responsibilities of Director / PM / Heads

Ref: Memorandum NO: ISRO: SS: 98 of Oct 1, 1986.

1. The above memorandum was finalised and issued in October 1986, after considerable discussions by Scientific Secretary ISRO / Secy PCNNRMS, Director NNRMNS - RRSSC, and PM NNRMNS - RRSSC.
2. The above one is yet to be operationalised, except that a few things are being done in an informal / adhoc manner (except of course the ACR working).
3. The magnitude of work is increasing tremendously, complexity is also going up - with confusion existing at the top, chaos will result down the line.
4. I suggest that we discuss this matter, if necessary with Shri Rajan also and sort out matter, so that people can discharge their functions / responsibilities.

in a better way, and with more  
dignity. Kindly refer my recent document  
on this matter.  
Regards

Rasendra

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February 25, 1987

To

Shri K. Karunanidhi

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cc Shri Y. S. Rajan.

GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
INDIAN SPACE RESEARCH ORGANISATION  
HEADQUARTERS

Ref : ISRO:SS:98

October 1, 1986

MEMORANDUM

In order to manage the complex tasks ahead for the setting up of the NNRMS Regional Remote Sensing Service Centres and their effective transition into the operational phase, as well as for discharging the specific responsibilities undertaken by ISRO/DOS for the installation of digital analysis facilities for the Central/State Government Departments (Tamil Nadu, UP, MP, DOEF, etc), the roles and responsibilities of the key executives of the RRSSC Team are spelt out in this Memorandum.

2. Shri K Krishnanunni, Director, NNRMS-RRSSC will be responsible for the overall direction and coordination of the various activities for the project phase and operational phase, and shall ensure compatibility between the actions of the project phase with the needs of the operational phase. Further he shall be responsible for the Inter-Centre coordination during the operational phase, user development/interfaces; and for providing consultancy for the definition of digital analysis facilities.

3. Shri K Radhakrishnan, Project Manager, NNRMS-RRSSC will have the prime responsibility for the project phase activities including manpower recruitment, installation acceptance testing and commissioning of the facilities and ensuring smooth transition to the operational phase. He shall also be responsible for instituting and operationalising the technical/management/administrative systems necessary for the operational phase.

4. The Heads of each RRSSC will be in charge of the full operation of the respective Centres in the operational phase. They will be involved in the project phase activities for familiarisation, and providing specific inputs and advice. The development of the users for each of the RRSSCs within the overall guidelines, analysis of the user reaction/suggestions, definition and generation of specific softwares/services required by the users shall be the responsibility of the Heads of RRSSCs, in addition to providing specific inputs for evolving central management policies.

5. Director, NNRMS-RRSSC and Project Manager, NNRMS-RRSSC will work in mutual standby mode, even while each will be taking prime responsibility for some of the various tasks as given in this order.

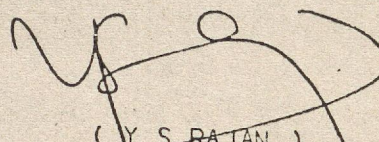
6. Till the time RRSSC personnel are assigned and positioned in the respective Centres after the initial training.

i) All Thematic Specialists and Scientific Assis(Photolab) with report to Director, NNRMS-RRSSC;

ii) Software/Computer Specialists and Scientific Asst (Computer operation) will report to Project Manager, NNRMS-RRSSC;

The members of the Central Management Team and the Administration personnel will report to Project Manager/Director, NNRMS-RRSSC.

7. The allocation of specific responsibilities between Director, NNRMS-RRSSC and Project Manager, NNRMS-RRSSC for the various central management functions are given in Annexure-1.

  
( Y S RAJAN )  
Secretary, PC-NNRMS

To : Shri K Krishnanunni, Director, NNRMS-RRSSC -  
Shri K Radhakrishnan, Project Manager, NNRMS-RRSSC

Heads, RRSSC :-

cc : Chairman, ISRO / Secretary, DOS - for information

1. SYSTEMS DEVELOPMENT

1.1 Director, NNRMS-RRSSC will have the responsibility to :

- i) ensure adequacy of the overall RRSSC facilities for the approved user requirements, conduct necessary reviews;
- ii) ensure adequacy of the applications software and bridging the gaps to meet the immediate, short term and long term needs, conduct necessary reviews;
- iii) provide consultancy to other agencies for the definition of digital analysis facilities;
- iv) preparation of technical brochures etc., on RRSSC facilities, its capabilities etc., as required by the users;

1.2 Project Manager, NNRMS-RRSSC will have the responsibilities for :

- i) ensuring the readiness of the building with necessary services;
- ii) monitoring the development and productionisation of the indigenous Intelligent Image Graphics Terminal;
- iii) Systems Integration, Acceptance Testing and commissioning of the RRSSC facilities, facility readiness review;
- iv) Systems operational manual;
- v) Maintenance plan
- vi) Definition of small digital analysis systems and monitoring of their indigenous development;

2. PROCUREMENT AND CONTRACT ADMINISTRATION

2.1 The administration of the DOS-SEP contracts for the procurement and installation of the Interactive Computer Systems, procurement of all equipment and the necessary interfaces with the Governmental Departments/bodies such as DOE, Customs, Excise etc., shall be the responsibility of the Project Manager, NNRMS-RRSSC.

3. FINANCIAL MANAGEMENT

3.1 Interfaces with the funding agencies and DOS on all matters related to financial sanction, budget, expenditure and

audit, as well as the management of the accounts of RRSSCs will be the responsibilities of Project Manager, NNRMS-RRSSC.

- 3.2 Evolution and implementation of pricing policy for the RRSSCs will be the responsibility of Director, NNRSM-RRSSC.

#### 4. PROGRESS MONITORING

- 4.1 Project Manager will be responsible for the progress monitoring during the project phase, including preparation of overall schedules/milestones, monthly/weekly reviews and implementation of corrective actions.
- 4.2 For the operational phase, the prime responsibilities for monitoring the Order booking user service, facility availability/utilisation, and implementation of the maintenance plans will be with Director, NNRMS-RRSSC.

#### 5. TRAINING

- 5.1 Project Manager, NNRMS-RRSSC will be responsible for the induction of all personnel, arranging training (including the training abroad) for all software/computer personnel and specific training needed for the operation/maintenance of major equipment.
- 5.2 Director, NNRMS-RRSSC will have the responsibility for arranging the training for the Thematic Specialists and the Photolab personnel. He shall be responsible for the evolution, planning and implementation of training programmes for the users, and preparation of training aids/materials.

#### 6. ADMINISTRATION

- 6.1 Director, NNRMS-RRSSC will be the overall in charge of the Administration. The personnel and general administration, cadre management and disciplinary matters shall be the prime responsibilities of Director, NNRMS-RRSSC.
- 6.2 Recruitment, allocation of personnel for the individual centres, evolution of administrative set up and direction/guidelines to the Asst Officers (of the Central Management Office and RRSSCs) for these tasks is the prime responsibility of Project Manager, NNRMS-RRSSC.

#### 7. MANAGERIAL MATTERS

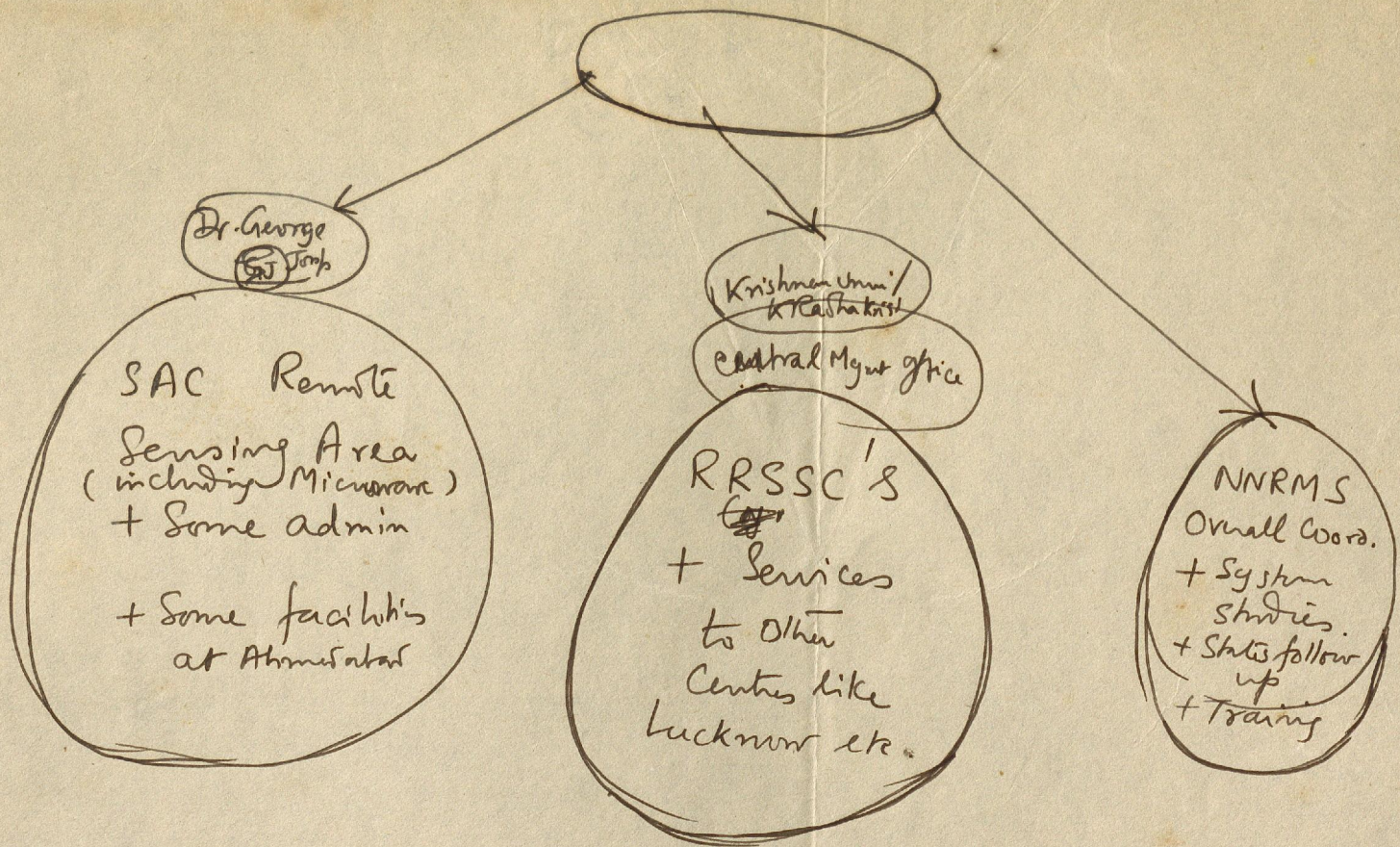
- 7.1 The reporting and interfaces with PC-NNRMS, and Chairman, ISRO/Secretary, DOS will be handled by Project Manager/Director, NNRMS-RRSSC under the overall guidance of

Secretary, PC-NNRMS.

7.2 Interface with the Associate Centres (those being set up by DOS for other Departments/Agencies) during their Project phase will be the responsibility of Project Manager.

7.3 Director, NNRMS-RRSSC will be responsible for

- \* Overall direction to the Centres
- \* Inter-Centre coordination
- \* Priority allocation (Inter-Centre/intra-Centre)
- \* Facility augmentation plans
- \* Manpower augmentation plans
- \* User facility interface, generation of operation procedure for the facility
- \* Interface with Associate Centres during the operational phase



Dr. George  
S. J. Singh

SAC Remote  
Sensing Area  
(including Microwave)  
+ Some admin  
  
+ Some facilities  
at Ahmedabad

Krishna Chari /  
K. R. S. Chari

Central Mgnt office

RRSSC's  
~~for~~  
+ Services  
to Other  
Centres like  
Lucknow etc.

NNRMS  
Overall Coord.  
+ System  
Studies  
+ Status follow  
up  
+ Training