# Recruitment of Scientist- G (s) in Level-14 of 7CPC in C-DOT Project Codes: SG-0101 to SG-0110

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### **Qualification:**

- B.Tech. (EC/CS) or equivalent, Post-Graduation (MTech, PhD.) is desirable.
- For the post of SG-0109, MBA is an essential qualification.

### **Experience:**

- Minimum 15 years of work experience in the field of Telecom technologies out of which minimum of 10 years of Research and Development experience in the relevant field.
- Applicants employed in the Central/ State Government Departments/ Undertakings/ Autonomous Bodies should be presently drawing pay in Level 13 of 7th CPC 123100-215900 or Level 13A of 7CPC of ₹131100-216600 or analogous scale with 5 years of experience.

## Age:

 Not exceeding 55 Years (for internal candidates not exceeding 58 years), as on the date of this notification

# Pay Scales, Perquisites and Benefits:

The post carries salary at the Government of India, Level 14 of 7CPC of ₹ **144200-218200**. Besides this, the position carries allowances like central DA, HRA and benefits like medical reimbursement, subsidy for purchase of house/ conveyance, official transport, reimbursement of membership of professional bodies, Contributory Provident Fund, LTC, telephone facility, Gratuity etc. as per C-DOT rules, as applicable from time to time.

#### No of Positions: 10

- 1) SG-0101: Scientist G Applications
- 2) SG-0102: Scientist G Radio Access Network Technologies
- 3) SG-0103: Scientist G Open RAN Technology Development
- 4) SG-0104: Scientist G Packet CORE Technology Development
- 5) SG-0105: Scientist G Field Support and Validation
- 6) SG-0106: Scientist G Network and Cyber Security Solutions
- 7) SG-0107: Scientist G Program Management
- 8) SG-0108: Scientist G Optical Technologies
- 9) SG-0109: Scientist G Business Development & Marketing
- 10) SG-0110: Scientist G Mobile Network Roll Out

# **Detailed Job description of positions:**

Work	Work Area	PROFILE	Skill Set
Area Code			
SG-0101	Scientist G Applications  Location- Bengaluru	Development of integrated, indigenous telecom solutions, leveraging software and associated applications, for various telecom technologies catering to the emerging trends, customer-specific applications, for Telcom, Defence & strategic customers.  The Roles & Responsibilities are:  Development of Network Management System Applications, and its deployment.  Spearhead the design and development of product, solutions & applications for Telecom technologies like Wi-Fi Stack, Radio/RAN, Optics, IOT etc. This includes customer requirements, analysis, and hardware sizing etc.  Constantly improvise the product design and development to overcome limitations of products/solutions deployed and fulfil the latest market/ technology demands.  To Interface with institutions, standard bodies like ITU-T, TMF, eTOM etc  To build expert groups for R&D of enabling/ futuristics technologies.  To drive the culture of innovations in the group.	<ul> <li>Adequate experience and Indepth knowledge of Network Management System technologies, Optical Systems, 4G/5G, Service Management Orchestration (SMO), Wi-Fi, and IOT/M2M.</li> <li>Expertise in design of NMS generic framework/ platform, for both wire line and wireless Products.</li> <li>Domain knowledge of NG OSS &amp; BSS.</li> <li>Proven track record of endto-end solutions delivery to TSP/ISPs in PAN India in a time bound manner.</li> <li>Experience in design, development of Mobile App in Android and iOS platforms</li> <li>Ability to drive innovation in creating solution, product &amp; Application, and middleware software involving Wireless technologies</li> <li>In depth Knowledge of System design aspects, Hardware and Software design cycles and practices in the Telecom/IP domain. Also of protocols like SNMP, TR069,TR181,XML,TMF814 frameworks, JSON, HTTP/HTTPS, Net-flow and integration of third party software applications / solutions through APIs</li> </ul>

Code Wo	ork Area	PROFILE	Exposure of handling large project and delivery of end-to-end products/ integrated solutions, customer engagement  Skill Set
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Rad Net Tecl Loca	entist G dio Access twork chnologies cation- ngaluru	Development of indigenous technology solutions for various 'Radio Access Network" for mobile technologies, which will meet the current business opportunity of 4G and enhanced to future technologies 5G/6G.  The product/ solution development, is to achieve for the latest release/ specifications of 3GPP with requisite use cases, as part of "Atma Nirbhar Bharat" initiatives of Government of India.  The roles & responsibilities are:  Spearhead the development of Radio Access technologies for 4G and also enable and to facilitate the indigenous ecosystem for 5G RAN developments, and handhold the technology enablement for RAN solutions of 5G/6G for future solution offerings.  Technical leadership for the development of various RAN/Future Wireless technologies (with 4G RAN technology as the immediate deliverable, with associated customization)  Developing the capability & competencies of the team, for Product, application & services delivery in 4G/5G RAN domain.  Drive the product development involving Hardware, Software,	<ul> <li>Adequate experience and indepth knowledge of RAN (Radio Access Technologies).</li> <li>Requisite understanding &amp; work exposure of relevant standards, regulations and technology trends.</li> <li>Hands-on experience of the development life cycle and delivery of Wireless technology products.</li> <li>In depth Knowledge of System Design aspects, Hardware and Software Design cycles and practices.</li> <li>Experience in handling cross-functional project coordination till successful delivery of the integrated solution, customer lead generation activities, post-release customer engagement and field support activities</li> <li>Proven ability to drive technology &amp; product innovations.</li> <li>Knowledge of CMMI &amp; organization processes and practices.</li> </ul>

		<ul> <li>System Engineering interfacing with other support teams.</li> <li>Continuously improvise the product design and development to overcome potential limitations for future needs.</li> <li>To drive the culture of innovations in the group.</li> <li>To interface with agencies responsible for standardization, regulatory to interface, align and drive C-DOT technologies for 4G, and future 5G/6G product development</li> </ul>	
Code	Work Area	PROFILE	Skill Set
SG-0103	Scientist G Open RAN Technology Development  Location- Bengaluru	Development of indigenous technology solutions for various 'Radio Access Network" for mobile technologies, which will meet the current business opportunity and enhanced to future technologies 5G/6G.  The product/ solution development, is to achieve for the latest release/ specifications of 3GPP with requisite use cases, as part of "Atma Nirbhar Bharat" initiatives of Government of India.  The roles & responsibilities are:  • Spearhead the development of Open-RAN for 5G and also enable and to facilitate the indigenous ecosystem for 5G RAN developments.  • Technical leadership for the development of 5G Open-RAN & O-RAN sub-systems and associated customization to build solutions for different target market segments.	<ul> <li>Adequate experience and indepth knowledge of Open-RAN for 4G/5G.</li> <li>Requisite understanding &amp; work exposure of relevant standards, regulations and technology trends.</li> <li>Hands-on experience of the development life cycle and delivery of Wireless technology products.</li> <li>In depth Knowledge of System Design aspects, Hardware and Software Design cycles and practices.</li> <li>Experience in handling cross-functional project coordination till successful delivery of the integrated solution, customer lead generation activities, post-release customer engagement and field support activities</li> </ul>

		<ul> <li>Developing the capability &amp; competencies of the team, for Product, application &amp; services delivery in O- RAN.</li> <li>Drive the product development involving Hardware, Software, System Engineering interfacing with other support teams.</li> <li>Continuously improvise the product design and development to overcome potential limitations for future needs.</li> <li>To drive the culture of innovations in the group.</li> </ul>	<ul> <li>Proven ability to drive technology &amp; product innovations.</li> <li>Knowledge of CMMI &amp; organization processes and practices.</li> </ul>
Code	Work Area	PROFILE	Skill Set
SG-0104	Scientist G Packet CORE Technology development  Location- Delhi	Responsible for development of indigenous technology solutions for 'Packet Core' for mobile technologies, to meet the current 4G business opportunity and future technologies 5G/6G.  The product/ solution development, is to achieve for the latest release/ specifications of 3GPP with requisite use cases, as part of "Atma Nirbhar Bharat" initiatives of Government of India.  The roles & responsibilities are:  Spearhead the development of Packet Core Technology & Applications and also enable indigenous ecosystem for 4G/5G sub-systems for developments of various use-cases.  Technical leadership for the development of Packet Core systems and associated customization to build solutions for different target market	<ul> <li>Relevant experience of development of similar product/solution and implementing software applications</li> <li>Shall have experience and hands on exposure of Mobile Technologies (4G/5G)</li> <li>Shall have experience of protocol software development and Internet Protocol based applications</li> <li>Shall have good knowledge of networking concepts and knowledge on cloud-based software development</li> <li>Experience of large database-oriented application development and of CI/CD</li> <li>Should have experience working on large-scale software projects as well as</li> </ul>

		<ul> <li>Interfacing with internal and external stakeholders such as Marketing team for Business opportunities</li> <li>PMTCs (Project management Team Coordinators) for the related projects for overall status assessment and issues resolution across various stakeholder groups involved in the project(s)</li> <li>Participation in various forums/ Standardization bodies</li> <li>Overall owner of the projects related to development of 4G/5G/6G Core network</li> </ul>	of using open-source technology  • Good leadership qualities such as teamwork spirit, collaboration, and communication skill
Code	Work Area	PROFILE	Skill set
SG-0105	Scientist G  Field Support and Validation	To spearhead all the deployment of telecom technologies (except 4G/5G Mobility technology) for all in-house indigenous developed technologies in the field, within defined Timeline, Cost and Quality.	<ul> <li>Hands-on experience of spearheading large projects/ roll outs of Telecom technology solutions, and managing validation and field supports</li> </ul>
	Location- New Delhi	Collaborate and coordinate with internal and external stakeholders and to drive the solution testing/validation, followed by field trials, roll-out and field support for different target market segments and strategic customers  The Roles & Responsibilities are:  • Spearhead the deployment/roll out of C-DOT technologies product & Solutions	<ul> <li>Hands-on experience in handling large projects and large teams and also handled cross-functional teams for completion of projects, validation, Acceptance, testing, &amp; certification</li> <li>Has exposure of validations, Integrations, field installation and interoperability activities of big telecom products</li> </ul>
		<ul> <li>Manage the validation and field Support and Integrations, as applicable with legacy/ fixed line (e.g MAX-NG, SDCN etc.) telecom solutions.</li> <li>Interface with Marketing, product and Application development teams for technological support.</li> </ul>	<ul> <li>Has experience in handling third party agencies for certifications / technology approval and Acceptance Testing certificate.</li> <li>Technical understanding of various telecom standards, interoperability and compliance requirements.</li> </ul>

		<ul> <li>Interface with customers to ensure that field requirements are clearly identified and incorporated in solution specifications and test plans.</li> <li>Develop and maintain strong collaboration/ coordination with various stakeholders, Third-party testing agencies and customer. Ensure user documents and training programs for customer</li> <li>Adherence of Quality and Process requirements for validation &amp; field support</li> <li>Constantly improvise validation techniques incorporating industry's best practices in testing</li> </ul>	Possess outstanding teamwork, collaboration and communication skills.
Code	Work Area	PROFILE	Skill set
SG-0106	Scientist G  Network and Cyber Security Solutions  Location- Delhi	Responsible for development of Network Security, IT security and Cyber security product & solutions as indigenous product for Telecom customers and strategic customers like Indian defence etc.  Development of indigenous technology solutions & products for Network securities and Cyber securities for Telecom technology domain areas.  The roles & responsibilities are:  Spearhead the development of network security, IT Security and Cyber Security solutions, product and applications  Technical leadership for the development of Network & Cyber security applications, systems & sub-systems and customization.  To spearhead the development of Telecom Security Projects such	<ul> <li>Exposure and in-depth domain knowledge of Post-Quantum-Cryptography technologies, Telecom Network security, IT Security, &amp; Cyber-security Technologies, Lawful Interception of Telecom Services</li> <li>Experience in Mobile Handset Security and Authentication/ Duplicate identity issues of Telecom Subscribers, relevant security standards, regulations and future technology trends.</li> <li>Requisite experience in the development and delivery of security solutions &amp; products</li> </ul>

		<ul> <li>as TSOC, Post-Quantum Security Solutions, CEIR/DIU, CMS etc</li> <li>Skill development- drive teams for capability &amp; competency of team.</li> <li>To drive state-of-art security products' development involving Hardware, Software, System Engineering.</li> <li>To collaborate with industry and academia for innovation in Telecom security solutions.</li> <li>To build expert groups which are able to conduct R&amp;D on the upcoming telecom security threats and align products &amp; applications in relevant areas.</li> </ul>	<ul> <li>In-depth Knowledge and working experience of Telecom Systems' Design aspects, Hardware and Software Design cycles</li> <li>Knowledge of CMMI &amp; organization processes and practices.</li> <li>Good communication skills and excellent interpersonal skills</li> <li>Preference to candidate having relevant cyber security certification</li> <li>Handled large complex product or solution development with on-time, delivery.</li> <li>Proven ability to deliver products in time, drive technology &amp; product innovations.</li> <li>Experience with budgeting and budget planning</li> </ul>
Code	Work Area	PROFILE	Skill set
SG-0107	Scientist G  Program Management  Location- Delhi	<ul> <li>Responsible for overall program management of all R&amp;D and Project roll out programs of C-DOT</li> <li>Will be the interface between all other senior officers, leadership team (including Sr executives, functional leaders, and Directors) for ensuring regular updates, monitoring and compliances</li> <li>Will ensure effective monitoring &amp; control of all projects, proposals and deliverables</li> <li>Ensure timely submission of compliances and reports to DOT</li> </ul>	<ul> <li>Good knowledge and understanding of latest telecom technologies.</li> <li>Experience in program management and coordination among multifacet technology R&amp;D units</li> <li>Have handled large IT and Telecom projects and had good understanding of Project monitoring tools</li> <li>PMP certification will be given preference</li> <li>various support functions of the organization such as HR, administration etc.</li> </ul>

		<ul> <li>and other regulatory agencies as applicable.</li> <li>Interface between all other Leadership, Sr Executives of C-DOT and enable requisite supports from functional teams such as HR, CFO, Registrar, Administration, Marketing, Training, Campus, Purchase, Corporate Strategic and Project management Group (PMG) etc.</li> <li>Ensure Project Monitoring and handling various aspects of project Monitoring, control, risk mitigation and conducting periodic governance/ reviews of various projects with respect to Annual Business plans</li> </ul>	<ul> <li>Have requisite experience of corporate strategy, Communication, Project Budget management.</li> <li>Experience in inter and intra organizations collaborations and technology sharing.</li> <li>Soft skills – Good communication, writing, organizing, planning and creativity skills.</li> <li>Persons having both R&amp;D, field and Marketing experience and in dealing with Govt departments will be given preference.</li> </ul>
Code	Work Area	PROFILE	Skill set
SG-0108	Scientist G  Optical Technologies  Location- Delhi	With the wider proliferation of optical fiber based broadband services as well as to cater to the requirements of rapidly evolving mobile technologies, deployment of optical networks in all segments of the network viz. access, metro and core is undergoing a massive transformation.  Optical technologies have penetrated the end-to-end network to ensure reliable, resilient, cost effective and future proof deployment of telecom infrastructure.  With an emphasis on 'assumption-free' security of the optical networks, development of Quantum Communications is a strategic focus  The responsibility is development of Integrated, indigenous solutions of	<ul> <li>Experience and In-depth knowledge of optical and quantum technologies, relevant standards and future technology trends.</li> <li>Experience in the development and delivery of products involving optical and quantum technologies.</li> <li>In depth Knowledge of System Design aspects, Product design cycles and practices.</li> <li>Ability &amp; eagerness to conceptualize, successfully design, develop &amp; deploy systems involving Hardware, Software and System engineering aspects.</li> <li>Experience in handling cross-functional project coordination till successful</li> </ul>

Next generation Optical network, Quantum secured optical networks.

Responsible to spearhead the development of product & applications and to drive the solution pf Optical networks and Quantum secured network, for different target market segments and strategic customers.

The Roles & Responsibilities are:

- Technology leadership for the development of various Optical & Quantum Communication technologies & associated customization to build solutions for different target market segments.
- To mentor different teams towards delivery of innovative products & Solutions in this area.
- To drive product development involving Hardware, Software, System Engineering interfacing with other support teams.
- To constantly explore use cases to conceptualize and deliver customized solutions and products
- To constantly improvise the product design and development to overcome potential limitations
- To build expert groups which are able to conduct R&D on the various enabling/contributing optical technologies.
- To interface with national and international standardization bodies in this domain.

- delivery of the integrated solution
- Proven ability to drive technology & product innovations.

Code	Work Area	PROFILE	Skill set
SG-0109	Scientist G  Business Development and Marketing  Location- Delhi	C-DOT, the premier Telecom R&D centre of the Government of India has indigenously designed and developed various technologies and solutions spanning Optical Communication, Switching and routing technologies, Wireless solutions, Cyber Security, Disaster Management, Network Management AI/ML and M2M/IoT based Telecom software solutions. In order to promote and create business opportunities for these indigenously built solutions, C-DOT is looking for Head Business Development & Marketing.  The roles & responsibilities are:  - Spearhead the marketing and business development of all indigenous product & solution developed by C-DOT  - Plan & develop Organization's marketing strategies  - Drive these marketing strategies  - Drive these marketing strategies to achieve adequate visibility of C-DOT across customers viz. Central & State Govt, PSUs and Indian army  - Drive the series of on-line and off-line marketing campaigns to generate awareness of C-DOTs products & Solutions  - Co-ordinate with stakeholders to drive the solution implementation for different target market segments  - Enable support from customers, to technical teams for timely resolution during roll out.	<ul> <li>Having MBA from reputed college/ university is must</li> <li>Good knowledge and understanding of latest telecom technologies.</li> <li>Experience in marketing of Telecom &amp; IT products and solutions.</li> <li>Experience that includes marketing strategy, brand strategy, internal and external communications.</li> <li>Ability to organize marketing events, large exhibitions, webinars, product demonstrations and promotional shows.</li> <li>Experience in facilitating internal and external communications and public relation activities, collaborations and materials including publications, media relations, and so forth</li> <li>Experience in handling social media platforms, preparing press briefs and other digital media competencies.</li> <li>Soft skills – Good communication, writing, organizing, planning and creativity skill</li> <li>Exposure of R&amp;D organization and dealing with Govt departments will have an added advantage.</li> </ul>

		<ul> <li>Carry out comprehensive market research to understand the market requirements.</li> <li>Requisite market view &amp; feedback to stakeholders/ Sr Executives of C-DOT, with outside-in perspective, for product development aligned to market needs.</li> <li>Creating funnel and timely participation in various opportunities, by preparing techno-commercial proposals</li> <li>Prepare MOUs, teaming agreements, NDAs for collaboration with customers.</li> <li>Help in the preparation of Annual Reports, event sponsorships, brochures, posters, banners etc.</li> <li>Represent C-DOT in exhibitions and events for demonstrating &amp; promoting C-DOT products and solutions</li> <li>Conduct webinars, deliver presentations and host events with external participation.</li> <li>Promote C-DOT events using social media platforms and through news items in the print media, and ensure C-DOTs participation in relevant Awards</li> </ul>	
Code	Work Area	PROFILE	Skill set
SG-0110	Scientist G  Mobile Network Roll Out Location- Delhi	Responsible for Roll-out of 4G/5G product & solution developed by C-DOT  The Roles & Responsibilities are:  • Spearhead the team for deployment of all products &	<ul> <li>Should have hands-on experience in handling         Telecom networks,         especially mobile networks         solutions' deployment.</li> <li>Should have work         experience of large scale roll</li> </ul>

- solutions of 4G/5G in domestic and international networks
- Project management such as project planning, monitoring, control. This includes assuring timely availability of material, resources and skilled manpower
- To be a technical leader for driving the end-to-end solution with various 4G/5G and associated sub-systems.
- To be the central co-ordinating group among cross-functional development groups, of 4G/5G subsystems.
- To constantly explore use cases to conceptualize and deliver customized solutions
- Collaboration & coordination with all internal & external rollout, for timely resolution of issued and periodic MIS reporting
- Establish regular feedback from Customer and (or) System Integrators, to elicit the end-toend solution level requirements and finalise the solution architecture blue print of the same for the 4G/5G solution
- Prime responsibility for commercial deployments of 4G/ 5G network solutions developed by C-DOT, in domestic and international public and private networks

- field Trials, and Support of telecom solutions of mobile networks
- Should have full understanding & exposure of Mobile Technologies (4G/5G)
- Should have good knowledge of telecom, networking concepts and cloud-based solutions
- Should possess leadership skill such as team player, collaboration and communication skills
- PMP profession or Prince certification will be given preference