## **CHECKLIST : PRE APVL STG**

| S No | Mandatory Details | Remarks |
|---|---|---|
| 1. | Name of Proj (incl ver). | Automated Op Wks Procedure |
| 2. | Name of Sponsor. | HQ Northern Comd GS (Plg) Br |
| 3. | Type of Sw (Bespoke/ COTS/ Customized). | Web Appln |
| 4. | Brief Justification/ endorsement on reqmt for devp of Sw appl. | (a) HQ Northern Comd GS (Plg) Br handles Op Wks (Rev) fund averaging to approx Rs 800 Cr each year. This entails processing of Jobs for apvl, re-app proposals, monitoring fund avbl and expdr state and undertaking analysis for futuristic plg. In the current sys, the job processing cycle commences from the Div level with apvl being granted by DGMO (MO-4). The present sys suffers from numerous demerits, which incl paper intensive wk, cumbersome data handling and monitoring, prone to human error due to frequent re-apps, multiple data feeding agencies delays in normal office dak procedures at all levels and laborious mgt of data & interpretation/ analysis.<br><br>(b) Auto of Op Wks procedure from Div level right up to DGMO (MO-4) will result in manpower saving (reqd only at job initiating end), instant visibility to the prog of Op Wks, digitisation of data, shortening of job processing and exec loop, thereby resulting in fast tracking of op Wks exec, booking of funds and analysis. This will enable smooth decision making at HQ Northern Comd for undertaking re-app of funds from one fmn to another. |
| 5. | Aim & Scope Purpose incl utility, beneficiaries and tgt users. | The software is planned to be implemented at all Div HQ, Corps HQ, HQ Northern Comd and DGMO (MO-4). It will be scalable for impl in other comds. Envisaged scope of software is as under :-<br><br>(a) **Broad Architecture**.<br><br>(i) Web based appln with Username & pwd for all stakeholders i.e. Plg br of Comd, Corps and guest logins.<br><br>(ii) Hosted on ADN (No addl reqmt of HW). Existing ADN PCs will be utliised.<br><br>(iii) Appln will be hosted on server in Regional Data Centre (Northern Comd Signal Regiment). |

|  |  | (b) **Maj Features**. Following info/ state will be readily avbl :-<br><br>(i) Fund expdr state, incl savings accured, booking of funds & fund bal for rel of jobs.<br><br>(ii) Status of processing of Job Nos.<br><br>(iii) Phy Prog of jobs.<br><br>(iv) Processing of Re-app proposals. |
|---|---|---|
| 6. | To be hosted on internet/ ADN with brief justification. | (a) To be hosted on ADN.<br><br>(b) This will give accessibility to all stakeholders at various levels.<br><br>(c) Hosting on ADN will also mitigate reqmt of any addl hardware for the users. |
| 7. | Being devp in house or through IT funds. | Through IT funds |
| 8. | Usability of proposed appls by other arms/ services/ org/ est. | Scalable for dply in other Comds |
| 9. | Hw and IT infrastructure reqd. | RDC Server (ex NCSR) |
| 10. | Brief detls of content of the proposed Sw appl. | (a) Op Wks jobs being exec in fmn AoR.<br><br>(b) Fund almt and avbl state. |
| 11. | Endorsement by Head of Br/ Svc/ Fmn | Endorsed by COS HQ Northern Comd |
| 12. | Details of user base. | (a) Engr Regts.<br><br>(b) GSO 1 (Plg) of Div HQ.<br><br>(c) Col GS (Plg) and GSO 1 (Plg) of Corps HQ.<br><br>(d) Col GS (Plg) and GSO 1 (Plg) of Comd HQ.<br><br>(e) Engrs Br and Corps HQ and Comd HQ.<br><br>(f) MO Dte and (MO-4). |
| **Addl Details (Optional in Pre Apvl Stg: Mandatory in Post Apvl Stg)** | | |
| 13. | Envisaged cost of entire proj incl license fees and maint. | Rs 10 Lacs |
| 14. | Projected dt of completion incl maj timelines | Dec 2024 |

| | | |
|---|---|---|
| 15. | Brief details of Sw platform and tech stack proposed for devp of appl incl op sys dependencies (if any). | Technologies to be used <br><br> (a) ASP.NET MVC. <br><br> (b) C#. <br><br> (c) Entity Framework. <br><br> (d) SQL Server. |
| 16. | Brief details of proposed network and bandwidth reqmts. | ADN |
| 17. | Brief detls of OS & Sys Software reqmts. | (a) **Server Config**. <br><br> (i) Windows server (Minimum requirement : Windows Server 2016) <br><br> (ii) SQL Server for database (Minimum requirement : SQL Server 2016) <br><br> (b) **Client PC**. <br><br> (i) Windows 10 or later. <br><br> (ii) Internet Explorer 11 or later, or other modern browsers. |
| 18. | Brief detls of Proposed data security measures incl backup of data. | (a) User authentication and authorization. <br> (b) Data encryption for sensitive information. <br> (c) Regular security audits and updates. <br> (d) Data Backup facility. |
| 19. | Brief detls of Proposed database Engine to be used in the Appl. | SQL Server 2016 (developer version) |
| 20. | Detls of Sw architecture and COTS Sw proposed to be utilised. | **Software Architecture**. The software will incl following modules :- <br> (a) Op Wks fund module. <br> (b) Job Processing module. <br> (c) Re-app module. <br> (d) User mgt module. <br> (e) Report Generation module. |
| 21. | Detls of proposed architecture - Centralised/ Federated/ Hybrid. | Centralised |
| 22. | Brief detls of proposed utilisation of Public Key Infra (PKI) and iden and Access Mgt (IAM). | Data encryption only. |

| 23. | Technology dependencies (if any). | |
|-----|-----------------------------------|---|
| 24. | Database reqmts. | SQL Software 2016 (developer version). |
| 25. | Enhancement / upgradation (incl patch mgt/ Sw updt procedure and mechanism). | Not Reqd |
| 26. | Details of licensing (if any). | Nil |

## TECH SPECS : AUTOMATION OF OP WKS PROCEDURE

1.     **Software Name**.     Automated Op Wks Procedure.

2.     **Board Architecture**.     Client - Server appln. Server to be hosted on RDC of NCSR.

3.     **Software Reqmt**.

    (a)     **Server Configuration**.

        (i)     Windows server (Minimum requirement : Windows Server 2016)

        (ii)     SQL Server for database (Minimum requirement : SQL Server 2016) (developer version)

    (b)     **Client PC**.

        (i)     Windows 10 or later.

        (ii)     Internet Explorer 11 or later, or other modern browsers.

4.     **Platform for Devp of Software**.

    (a)     ASP.NET MVC.

    (b)     C#.

    (c)     Entity Framework.

    (d)     SQL Server.

5.     **Security Measures**.

    (a)     User authentication and authorization.

    (b)     Data encryption for sensitive information.

    (c)     Regular security audits and updates.

    (d)     Data Backup facility.