TRANSFORMATIVE REFORMS FOR STRENGTHENING ASSESSMENT AND ACCREDITATION OF HIGHER EDUCATION INSTITUTIONS IN INDIA

Report of The Overarching Committee
(Constituted by Ministry of Education)

November 2023

Department of Higher Education
Ministry of Education, Government of India
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1. EXECUTIVE SUMMARY

National Education Policy 2020 (NEP 2020) is set to drive the economic and social development of the nation in the coming decades. Imperative for strengthening the assessment and accreditation of Higher Education Institutions (HEIs) has been imminent, especially to conform to the NEP 2020 that envisions a National Accreditation Council (NAC) as one of the four verticals of the proposed Higher Education Commission of India (HECI).

This overarching committee was constituted (i) to propose actionable recommendations to strengthen the accreditation processes by NAAC, NBA and the ranking system by NIRF, (ii) to recommend how more institutions come into the fold of accreditation, and (iii) to prepare a roadmap for aligning NAAC, NBA, and NIRF to the proposed NAC in HECI.

Presently, multiple agencies within the ambit of the Union Government of India have been mandated for periodic approvals, assessment, accreditation and ranking of HEIs. The low level of willingness of HEIs to volunteer for this process continues to be a cause of concern. Besides the plurality of all-encompassing information (much of which may not be completely applicable for diverse categories of HEIs), as well as the long and cumbersome process for collection of the information by these agencies (that too at different periodicity), there are concerns on subjectivity in the processes, and inconsistencies between assessment by different agencies.

This overarching committee, constituted by the Ministry of Education in November 2022 studied the issues; deliberated on it over six sittings in tandem with a sub-committee of specialists as well as consulted senior functionaries of the Ministry of Education, UGC, AICTE, NAAC, NBA, NIRF and Council of IITs. A set of transformative reforms have been proposed to strengthen the periodic approval, assessment & accreditation, and ranking of ‘All HEIs’ of India. Also, during this exercise, the Overarching Committee considered the reports of three related Committees of UGC, together with the report of an Audit Committee of NAAC that had been set up by the then Chairman of its Executive Committee.

These reforms have been proposed with a strategic intent to be consistent with the Vision of NEP 2020, adopt, right away, a simple, trust-based, credible, objective and rationalised system for approval, accreditation and ranking of HEIs, with

(a) a verifiable and secured centralised database
(b) technology-driven modern systems that could replace/minimise manual involvement
(c) mentoring and incentivising schemes for raising their participation as well as accreditation levels, towards eminence, significance and global acclaim

A high level brainstorming session, held on 22 March 2023, provided valuable inputs, besides the resolve to prepare for mission-mode transition in two stages. The outstanding tasks and timeline for this transition is given in Section 10 of this report, and the necessary actions are in progress.
The specifics of the proposed reforms given in Section 9 of this report are summarised below:

1. Transition from the present 8-point grading system of NAAC to an adapted Binary Accreditation System viz.
   • ‘Accredited’,
   • ‘Awaiting Accreditation’ (for those who are close to the threshold level),
   • ‘Not Accredited’ (for those who are far below the standards for accreditation).

2. Encourage Accredited Institutions to raise their bar, evolve in-depth or in-breadth in disciplines from ‘Level 1’ to ‘Level 4’ Institutions of National Excellence, and then to ‘Level-5’ i.e. Institutions of Global Excellence for Multi-Disciplinary Research and Education.

3. Enable Choice-based Ranking System for diverse stakeholders (students, funding agencies, industries etc.).

4. Amalgamate Programme-Accreditation and Institutional-Accreditation, considering their inter-dependency; and evolve a Composite Assessment System (as a Composite Table, or ‘Star Plots’ detailed in chapter 9).

5. Mentor the Institutions falling ‘far below the standards for accreditation’. (HEIs from the accredited group may be encouraged to become mentors, with suitable credit given during their re-accreditation).

6. Simplify the accreditation process, especially for the first cycle, and bring down periodicity for Re-accreditation to six years. Existing stipulation for annual re-approvals (by AICTE for technical educational programmes) may be eliminated, if the scope of the programme does not alter significantly.

7. Include all HEIs and every programme in the newly proposed assessment and accreditation system with due regard for their statutory dispensations (e.g. IITs).
Consider the heterogeneity of HEIs in the country, categorise them based on their orientation/vision and heritage/legacy, and then seek information from the HEIs that are appropriate for their category (rather than a one-size-fits-all model in vogue currently).

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Suggested Category of HEIs</th>
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<tbody>
<tr>
<td>Orientation and Vision</td>
<td>• Multi-disciplinary Education and Research-Intensive</td>
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<td>• Research-Intensive</td>
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<td>• Teaching-Intensive</td>
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<td>• Specialised Streams</td>
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<td>• Vocational and Skill-Intensive</td>
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<td></td>
<td>• Community Engagement &amp; Service</td>
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<td></td>
<td>• Rural &amp; Remote location</td>
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<tr>
<td>Heritage and Legacy</td>
<td>• Old and Established</td>
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<td></td>
<td>• New and Upcoming</td>
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(Note: # More categories may be added as required).

Accredit with appropriate consideration for Inputs, Processes, Outcomes and Impact across different attributes of HEI (instead of more input-centric). A framework for parametrising Input, Process, Outcomes, and Impact has been suggested. Linking parameters to essential variables, and, assigning weightages (business logics) for the varied purposes of approval, accreditation and scoring/ranking is a work in progress.

Develop a ‘Unified Elicitation Tool’ to collect the superset of data from HEIs for the varied purposes (of approval, accreditation, ranking) with an in-built design for collateral cross-checking to check authenticity of data and in conjunction with it, introduce maximally the technology-driven modern systems, to replace the existing manual/hybrid systems of assessment and accreditation thereby minimising subjectivity and enhancing transparency and credibility.
The ‘One Nation One Data Platform’ may be upgraded to a robust architecture to provide:

a) adequate access control and security features,

b) ingestion of harmonised data (with due quality checks) into a single format (with the applicable essential variables),

c) single point data entry by HEIs with the provision for yearly updates (enabling ‘ease of doing business’ for HEIs),

d) flexible and robust data management scheme with ‘business logics’ for the varied purposes of approval, accreditation and scoring/ranking,

e) handling of collateral data and stakeholder-crowdsourcing for verification of input data and trust-enhancement measures (replacing the current manual verifications and minimising dependence on visit of personal teams),

f) application programming interfaces (APIs) for pushing data from varied agencies into the centralized database that is being developed, and

g) compatibility with the national digital framework for good governance (e.g. NDEAR, InDEA 2.0 and GATISHAKTI), future digital campus of HEIs (e.g. SAMARTH, Swayam 2.0), as well as AISHE Portal, Digilocker and Academic Bank of Credits etc.

Trust Institutions (along with significant penalty for wrong doings/submissions) and ensure public disclosure of relevant data by HEIs, to enhance the overall process-credibility.

Initiate a robust outreach mechanism in tandem with effective methods of handholding the potential entrants (which is the large majority now), where the aim should be to facilitate all HEIs in the country towards joining the process of accreditation and ranking at the earliest. This will be an important requirement for the successful implementation of NEP 2020.
### 2. CONTRIBUTORS


<table>
<thead>
<tr>
<th></th>
<th>Name</th>
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<tbody>
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<td>Dr. K. Radhakrishnan</td>
<td>Chairman</td>
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<td>Prof. Mridul Hazarika</td>
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<td></td>
<td>Vice-Chancellor, Mahapurusha Srimanta</td>
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<td>4</td>
<td>Joint Secretary Dept. of HE, MoE</td>
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<td></td>
<td>• Smt. Kamini Chauhan Ratan (during Nov 2022)</td>
<td>- Convener</td>
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<td>• Smt. Saumya Gupta (Dec 2022-March 2023)</td>
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<td></td>
<td>• Smt. Rina Sonowal Kouli (Since March 2023)</td>
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**B) Special Invitees for consultations, advice and brainstorming**

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<th>Name</th>
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<tr>
<td>5</td>
<td>Shri. K. Sanjay Murthy</td>
<td>Secretary, Dept. of Higher Education, MoE</td>
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<tr>
<td>6</td>
<td>Prof. M. Jagadesh Kumar</td>
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<td>8</td>
<td>Prof. Anil Sahasrabudhe</td>
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<tr>
<td>10</td>
<td>Prof. D.P. Singh</td>
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<tr>
<td>11</td>
<td>Prof. G. Kannabiran</td>
<td>Director NAAC (since 28 July 2023)</td>
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### C) Special Invitees for presentations of reports of related committees

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<tbody>
<tr>
<td>12</td>
<td>Dr. Manish R. Joshi</td>
<td>Secretary UGC for Committee-1 of UGC</td>
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<tr>
<td>13</td>
<td>Prof. Indranil Manna</td>
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<tr>
<td>14</td>
<td>Prof. Surendra Prasad</td>
<td>Chairman of Committee-2 of UGC</td>
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<td>16</td>
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</tr>
<tr>
<td>17</td>
<td>Prof. J.P. Joorel</td>
<td>Audit Committee of Chairman EC-NAAC</td>
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</table>

### D) Sub-Committee of Specialists constituted vide Office Order No. 12-11/2022-U1 dated 3 January 2023 on the unification of data segment and common platform

<table>
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<th>Name</th>
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<tbody>
<tr>
<td>18</td>
<td>Prof. Rajat Moona</td>
<td>Director, IIT Gandhinagar (Chairman)</td>
</tr>
<tr>
<td>19</td>
<td>Prof. Santhanu Chaudhury</td>
<td>Director, IIT Jodhpur</td>
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<tr>
<td>20</td>
<td>Prof. Shalabh</td>
<td>Dean of Academic Affairs, IIT Kanpur</td>
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<td>21</td>
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<td>22</td>
<td>Prof. Yogesh Singh</td>
<td>Vice Chancellor, University of Delhi</td>
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<td>23</td>
<td>Prof. B.J. Rao</td>
<td>Vice Chancellor, University of Hyderabad</td>
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<td>24</td>
<td>Prof. Ashutosh Srivastava</td>
<td>Assistant Professor, IIT Gandhinagar ( Invitee)</td>
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<td></td>
<td>Senior Functionaries and Specialists of related Institutions</td>
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<td><strong>MoE (Statistics and NIC Wings)</strong></td>
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<td>26)</td>
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<td><strong>National Bureau of Accreditation (NBA)</strong></td>
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<td>27)</td>
<td><strong>Dr. A.K. Nassa</strong></td>
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<td></td>
<td>Member Secretary, NBA</td>
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<td>28)</td>
<td><strong>Dr. Priyanka Singh</strong></td>
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<td>29)</td>
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<td>30)</td>
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<td><strong>Dr. B.S. Ponmudiraj</strong></td>
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<td>32)</td>
<td><strong>Shri. Samuel Lourdraj</strong></td>
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<td>33)</td>
<td><strong>Dr. Manju Singh</strong></td>
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<td></td>
<td>Former Joint Secretary, UGC</td>
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<td>34)</td>
<td><strong>Dr. Nikhil Kumar Sachan</strong></td>
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<td>All India Council of Technical Education (AICTE)</td>
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| 41) | Shri. Siddhant Sirohi  
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**F) Overall Coordination and Secretarial Support (Dept. of Higher Education)**

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| 42) | Smt. Smita Srivastava  
     | Director, UGC |
| 43) | Smt. Anita Sirohiwal  
     | Joint Director, Statistics |
| 44) | Shri. Devendra Kumar Sharma  
     | Deputy Secretary, Policy Division |
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3. INTRODUCTION

3.1. Background

Over the years there has been an increasing emphasis on strengthening the Assessment and Accreditation of Higher Education Institutions (HEIs) in the country, as is evident from the relevant pronouncements of the National Education Policy 2020 (NEP 2020), the National Conference of Chief Secretaries held in June 2022 at Dharmashala, the 341st Report of Parliamentary Standing Committee on Education, Women, Children, Youth & Sports in (July 2022), Akhil Bharatiya Shiksha Samagam organized in July 2022 at Varanasi and Akhila Bharatiya Shiksha Samagam organised in July 2023 at New Delhi.

Further, Vision India@ 2047 envisages Indian Higher Education Institutions (HEIs) to rise to figure in top World University Rankings.

3.2. Current Systems for Approval, Accreditation and Ranking

Besides the University Grants Commission (UGC) that accords recognition to the HEIs under the provisions of clause (f) of section 2 and section 12B of the ‘UGC Act 1956’, multiple agencies within the ambit of the Government of India have been mandated for periodic approvals, assessment, accreditation and ranking of HEIs. For example:

• National Assessment and Accreditation Council (NAAC), an Inter-University Centre (1994) of UGC, does assessment and a graded accreditation of HEIs at the Institution level, over 5-year block periods.

• National Board of Accreditation (NBA), now an autonomous organisation under the Ministry of Education, Government of India does binary accreditation of programmes in technical disciplines for either 6-year or 3 year-block periods.

NBA has become the permanent signatory member of the Washington Accord on 13th June 2014. The NBA accredited programs offered by the Tier-1 Engineering/Technology Institutions are eligible for the recognition of the programs by other signatories of the Washington Accord (Currently 23 countries) for higher studies and work. The membership of Washington Accord is an international recognition of the quality of undergraduate engineering education offered by the member country and it encourages and facilitates the mobility of engineering graduates and professionals at international level.

• All India Council of Technical Education (AICTE) does the mandatory annual approval of all programmes/courses in technical educational institutions following processes (mostly online) stipulated in the most recent ‘AICTE-Approval Process Handbook 2022-23’.

• National Institutional Ranking Framework (NIRF), launched in 2015, ranks the participating institutions annually in terms of overall rank and discipline-specific ranks, based on scores computed using five broad sets of parameters (NBA continues to be the ranking agency on behalf of NIRF).
Each of these agencies collects information from the responder HEIs that may be the same or similar, as depicted below, over a 6-year period:

3.3. National Accreditation Council Envisioned in NEP 2020

For transforming the Regulatory System of Higher Education, the NEP 2020 envisions that the distinct functions of regulation, accreditation, funding, and academic standard setting will be performed by distinct, independent, and empowered bodies, to be set up as four independent verticals working synergistically within one umbrella institution, the Higher Education Commission of India (HECI).

One of the four verticals of HECI, viz. National Accreditation Council (NAC), has been envisaged as the ‘meta-accrediting body’ with responsibility for overseeing and supervising an independent ecosystem of accrediting and ranking of institutions and programmes.
3.4. Guidance from NEP 2020 on Accreditation

On Accreditation of HEIs per se, NEP 2020 (ref. para.18.4) further states that:

“Accreditation of institutions will be based primarily on basic norms, public self-disclosure, good governance, and outcomes, and it will be carried out by an independent ecosystem of accrediting institutions supervised and overseen by NAC.

In the long run, accreditation will become a binary process as per the extant global practice.

The task to function as a recognized accreditor shall be awarded to an appropriate number of institutions by NAC.

In the short term, a robust system of graded accreditation shall be established, which will specify phased benchmarks for all HEIs to achieve set levels of quality, self-governance, and autonomy.

The functioning of all the independent verticals for Regulation (NHERC), Accreditation (NAC), Funding (HEGC), and Academic Standard Setting (GEC) and the overarching autonomous umbrella body (HECI) itself will be based on transparent public disclosure, and use technology extensively to reduce human interface to ensure efficiency and transparency in their work. The underlying principle will be that of a faceless and transparent regulatory intervention using technology.

Strict compliance measures with stringent action, including penalties for false disclosure of mandated information, will be ensured so that Higher Education Institutions are conforming to the basic minimum norms and standards.

In turn, all HEIs will aim, through their Institutional Development Plans (IDPs), to attain the highest level of accreditation over the next 15 years, and thereby eventually aim to function as self-governing, degree-granting institutions/clusters.

Further, on HECI in general, NEP 2020 (ref. para 18.10) states inter alia that:
3.5. Present Accreditation Systems vis-à-vis NEP 2020’s Vision

While NEP 2020 envisages a completely new system of accreditation through NAC, the present system adopted by NAAC is grossly divergent from the desired objectives of NEP 2020 as highlighted below:

<table>
<thead>
<tr>
<th>Present Accreditation System</th>
<th>NEP 2020 Vision</th>
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<tbody>
<tr>
<td>Score-based, Multiple Grade Accreditation</td>
<td>Binary Accreditation</td>
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<tr>
<td>Portal Self-Disclosure</td>
<td>Public Self-Disclosure</td>
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<tr>
<td>Single Accreditation institutions</td>
<td>Approved Accreditation institutions</td>
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<tr>
<td>One-Size-Fits-All Model</td>
<td>University-Type-Based process</td>
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<tr>
<td>Input-Process-Limited-Outcome approach</td>
<td>Majorly Outcome-Based approach</td>
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<tr>
<td>Generic policy benefits as an incentive for accreditation</td>
<td>Empirical policy benefits to motivate accreditation</td>
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3.6. Concerns and Way Forward

Notably, there have been concerns about the low level of willingness of HEIs to volunteer for the assessment and accreditation process besides the cumbersome, all-encompassing information requirements (much of which may not be completely applicable for diverse categories of HEIs), overarching subjective processes, inconsistencies between assessments of HEIs by different agencies etc.

For addressing the present issues involved in the assessment and accreditation processes, deliberations have been held by the Government of India, and the following focus areas have been considered:

• Closely engaging with Universities/HEIs to identify and understand their perspectives.
• Examination of the existing documentation/verification processes and simplification/rationalization.
• Adopting an incentive-based, facilitation-oriented approach to encourage HEIs to undertake accreditation.
• Studying the global best practices in accreditation and ranking of HEIs and their courses.
• Carrying out stakeholders’ consultation to further streamline the existing accreditation process of NAAC/NBA/NIRF to enhance the credibility and value of accreditation and ranking.
• Rationalization of the present system of recognition/accreditation and ranking by multiple agencies.
3.7. Related Committees Constituted by UGC and Chairman EC-NAAC

On the advice from the Dept. of Higher Education, UGC had set up three Committees, during August-November 2022 on specific topics:

(i) Firstly, UGC had constituted a Committee, in August 2022 under the chairmanship of Prof. Bhushan Patwardhan to propose a roadmap to develop the National Accreditation Council (NAC) envisioned in the NEP 2020, as a meta-accrediting independent and autonomous body under the Higher Education Commission of India (HECI), through the synchronized working of the NAAC, NBA, and NIRF [Referred to as ‘Committee-1 of UGC’ in this Report].

(ii) Secondly, UGC constituted a Committee, in October 2022 under the Chairmanship of Prof. Surendra Prasad to develop a framework for Rationalization of Accreditation and Ranking aligned with NEP-2020 [Referred to as ‘Committee-2 of UGC’ in this Report].

(iii) Thirdly, UGC had constituted yet another Committee, in October 2022 under the Chairmanship of Prof. M.K. Sridhar, to: (a) understand the ongoing NAAC methodology with a multidimensional perspective as seen by the HEIs of all types; (b) explore the best practices followed by similar accrediting agencies in major developed nations; and (c) identify certain improvements and improvisations to not only encourage the participation of various types of HEIs in the NAAC Accreditation process but also increase the levels of confidence amongst critical stakeholders [Referred to as Committee -3 of UGC in this Report].

Further, the Chairman of the Executive Committee had constituted a Committee, in August 2022, under the chairmanship of Prof. J.P. Joorel for a systematic audit for optimisation and future improvements in the assessment and accreditation system of NAAC [Referred to as Audit Committee of Chairman EC-NAAC in this Report]. Also, a Committee constituted by the Director NAAC in September 2022, had conducted an ICT Audit of NAAC.

3.8. Constitution of this Overarching Committee

Subsequently, this overarching Committee was set up by the Dept. of Higher Education, Ministry of Education, Government of India vide Order No. 12-11/2022-U1 dated 3 November 2022 (Annexure-1) for strengthening the assessment and accreditation of HEIs.

The Terms of Reference for this overarching Committee are:
- to strengthen the accreditation processes by NAAC; NBA and the ranking system by NIRF,
- to recommend how more institutions come into the fold of accreditation, and
- to prepare a roadmap for aligning NAAC, NBA, and NIRF to the proposed National Accreditation Council (NAC) in HECI.

3.9. Constitution of an Implementation Committee

For ensuring the new system for Accreditation/Assessment/Ranking, being proposed by this Committee, may be finalized and launched in ‘Mission Mode’, the Dept. of HE, MoE, vide Order dated 12th May, 2023, has further constituted an Implementation Committee for Reforms in Assessment, Accreditation & Ranking under the Chairpersonship of Prof. Anil Sahasrabudhe, Chairman, National Education Technology Forum (NETF).
4. DELIBERATIONS AND CONSULTATIONS

4.1 Deliberations of the Overarching Committee

The Overarching Committee held a structured series of six meetings (on 17 November 2022, 21 December 2022, 22 January 2023, 28 January 2023, 8 February 2023 and 13 April 2023).

4.2 Brainstorming Session

A high-level Brainstorming session was held on 22 March 2023, with officials from the Ministry of Education, UGC and AICTE, that reached the resolve to prepare for mission-mode transition to the new system in two stages. In addition, a meeting was held on 13 April 2023. All the above meetings were conducted predominantly in physical mode, with able support from the Director (UGC) and senior officials of the Ministry of Education.

Notably, a Sub-Committee of Specialists constituted on 3 January 2023 (Annexure 2) on the unification of data segments and a common data platform, worked in tandem with the Committee from the third meeting up to the completion of this report. This committee availed the benefit of perceptive interventions of the Ministry of Education, Government of India.

4.3 Consultations with UGC, AICTE, NBA, NIRF and NAAC

The Overarching Committee roped in senior functionaries of AICTE, NBA/NIRF, NAAC, and M/o Education, particularly, Chief Coordinating Officer AICTE, Member-Secretary NBA (and in-charge of NIRF), Advisors of NAAC, and DDG (Statistics) of Dept. of Higher Education, to make thematic presentations on:
(a) the current mechanisms and processes of approvals, assessment, accreditation and ranking
(b) reportage, data structure and growth potentials of the existing All India Survey of Higher Education Portal (AISHE) of Dept. of Higher Education, and the ‘One Nation, One Data’ Platform.

Further, during the meeting held on 8 February 2023, Committee had in-depth consultations with The Chairman UGC, The Chairman AICTE, and The Chairman National Educational Technology Forum (NETF), and their suggestions were taken on board.

4.4 Stakeholder Consultations

• The draft report of this Committee was uploaded on the ‘MyGov’ portal and ‘MoE’ website for seeking public opinion/stakeholder consultation and placed in the public domain from 19th May, 2023 to 22nd June, 2023; later extended upto 15th July, 2023.

• For seeking further involvement of the stakeholders, an Online Consultative Workshop on Reforms in Assessment, Accreditation and Ranking of Higher Education Institutions was also held on 7th July, 2023. This workshop was inaugurated by Hon’ble MoS (SS), MoE and attended by 34 panelists and more than 950 participants from HEIs across the country, including heads of institutions.
• During the Akhila Bharatiya Shiksha Samagam, 2023, a thematic session on National Institutional Ranking Framework was held. This draft report of the Committee was discussed and deliberated during this thematic session. For further soliciting opinion of the stakeholders, the report was again placed in the public domain from 8th - 15th August, 2023.

• As on 25 September 2023, about 1450 feedback have been received from various categories of stakeholders on the draft report.

4.5 Presentations and Deliberations in the Council of IITs

It may be recalled that, currently, IITs follow their internal systems for periodic peer evaluation and assessment of programmes. For bringing in all IITs under the ambit of the unified accreditation process and in-principle adoption of the National Credit Framework, a presentation of the proposed reforms was made to the Council of IITs in its 55th meeting held at IIT Bhubaneswar on 18 April 2023. Their acceptance in-principle was gained, and as the next step, this Committee’s report will be circulated to all IITs for their suggestions, which will be deliberated in the next meeting of the Council.
5. PRESENT STATE OF ACCREDITATION AND RANKING OF HIGHER EDUCATION INSTITUTIONS IN INDIA

5.1 Coverage of Indian HEIs in National Accreditation and Ranking

Institutional Accreditation by NAAC (as on 30 September 2023)

- 447 out of 1219 of Degree-awarding Institutions (i.e. 36.67%) have been accredited.
- 9479 out of 43796 Colleges (i.e., 21.64%) have been accredited.
- Total number of Accreditations done by NAAC across all cycles for Higher Education Institutions is 16915.
- 43 Central Universities falling under the purview of M/o Education have been accredited (out of a total of 55 Central Universities, 47 are under the purview of the M/o Education).
- There are 38 centrally funded Institutions Deemed to be Universities (IDTBU) with 13 under the purview of MoE and 25 under other Ministries. 23 IDTBUs, 10 under MoE & 13 under other Ministries, have been accredited.
- 70 Dental Colleges, 26 Health Science Universities, 24 Medical Colleges, 11 Pharmacy Colleges, 7 Ayurveda Colleges, 4 Homeopathy Colleges, 5 Physiotherapy Colleges and 4 Allied Health Science Institutes have been accredited by NAAC.
- NAAC has also done the accreditation of Centrally Funded Institutions Deemed to be Universities under the M/o Agriculture & Farmers Welfare, M/o Commerce & Industry, M/o Home Affairs, M/o Science & Technology, M/o Youth Affairs & Sports, M/o Law & Justice, M/o Finance, M/o Defence and Dept. of Atomic Energy.

Programme Accreditation by NBA (as on 30 September 2023)

- Technical Institutions like NITs are seeking accreditations for their programmes/ courses from NBA. As on date, out of the 649 programmes offered by the NITs, 292267 have been accredited by NBA.
- NBA has accredited 1715 programs of M/o Chemicals & Fertilizers, 7 programs of M/o Defence, 2 programs of M/o Agriculture & Farmers’ Welfare and 1 program each of M/o Commerce & Industry, M/o Environment, Forest & Climate Change and of M/o Textiles.

Institutional Rankings by NIRF (2023)

- IITs, IIITs, IIMs, SPAs, AIIMS, NIPERs, JIPMER, PGIMER, NIFTEM and several other INIs participate in the NIRF.

In sum, it is observed that although the accreditation and ranking of HEIs is on the rise more recently, the participation levels of HEIs in these processes need to improve significantly and rapidly, keeping in line with the high aspirational state of the country now.
5.2 Indian HEIs in QS World University Ranking 2023

Several measures have been initiated in the Higher Education sector for improving the ranking of the HEIs. There has been a remarkable improvement in India’s Performance in the Quacquarelli Symonds (a.k.a QS) World University Rankings 2023 edition. As an outcome of the persistent efforts, Indian HEIs participating in QS rankings have, this year, improved Academic Reputation and Employer Reputation scores by 200% and 150%, respectively.

- In the QS World University Rankings 2023, Indian Institute of Science (IISc) gained the place of 155, while remaining as the world’s top research university (with a score of 100 in ‘citations per faculty criteria’). The Indian Institutes of Technology (IITs) are steadily positioning themselves higher in the rankings, a testimony to the strength and success of the Indian public technological research university model, reflecting their status and role as Institutes of National Importance.

- Among the IITs, Indian Institute of Technology Bombay is the most highly ranked IIT (#172 up from #177 last year), followed closely by Indian Institute of Technology, Delhi; Indian Institute of Technology Madras; Indian Institute of Technology Kanpur; Indian Institute of Technology Kharagpur; Indian Institute of Technology Roorkee; Indian Institute of Technology Guwahati and Indian Institute of Technology Indore, all securing a better ranking than in 2022 and figuring among the top 400 universities in the world.

- The National Institute of Technology (NIT) Tiruchirappalli is also ranked in the top 1000. Moreover, 41 Indian Universities, including IITs, CUs, IoEs, IDTBUs, figure in the list of top 1000 QS World University Rankings of 2023.

- An improved number of State Universities is also a noteworthy scale-up in the QS World University Rankings 2023 with Savitribai Phule Pune University, University of Madras, Jadavpur University, and Chandigarh University amongst others.

- India has improved her position in the QS World University Rankings by Subject-2023 [with 44 courses in their subject categories offered in the country’s HEIs ranked among the global top 100].

- In the five broad subjects of the QS World University Rankings by Subjects 2023, viz. Arts & Humanities, Engineering & Technology, Life Science & Medical Science, Natural Sciences, Social Sciences an Management, a total of 66 Indian institutions have been ranked. Further, in 54 specific subject categories under these broad categories, 355 Indian institutions have been ranked.

The highest number of HEIs have been ranked in Chemistry (27) and Computer Science & Information (27), followed by Business and Management Studies (21), Biological Sciences (21), Physics and Astronomy (20), Mathematics (16), Mechanical, Aeronautical & Manufacturing Engineering (16), Pharmacy & Pharmacology (15), and Electrical & Electronic Engineering (15).

5.3 Plurality of Variables and Data sought by the four Agencies (AICTE, NAAC, NBA and NIRF)

Further, to the brief of Section 1.2, it was observed each of these four agencies (AICTE, NAAC, NBA, and NIRF) build upon the same or similar information base for the approval, assessment, accreditation, and ranking of institutions.

An inventory of the variables and data structures was taken by the Overarching Committee. In total, there are 93 variables (as on 12 May 2023) on which each responder HEIs is required to provide data (at different periodicity), collected by the agencies through four separately defined processes. This has also resulted in a cumbersome effort on the part of the accreditation bodies as well as the HEIs. These variables may be suitably revised/augmented based on the proposed changes in the accreditation methodology to be brought out by the agencies.
The Overarching Committee considered the reports of the above Committees, and formally interacted with the Chairperson of Committee-2, Committee-3 of UGC, the Chairman of EC-NAAC, the Secretary UGC and a Member of the Committee-1 of UGC. These were quite insightful and useful for the work of the Overarching Committee. Highlights from these reports are given in paragraphs 6.1 to 6.4 below:

### 6.1 On the Roadmap

1. The wealth of experience of the three institutions, viz. NAAC, NBA, and NIRF, will be quintessential for the development of the NAC.

2. The idea of holistic education and education along multiple dimensions is at the core of NEP 2020 recommendations. Therefore, it is proposed that accreditation should focus on the achievement of learning outcomes along the intellectual dimension, and that ranking may additionally focus on the achievement of learning outcomes along multiple dimensions.

3. The framework for assessing and accrediting an institution will have to account for the outcome-based assessment of both General Education & Specialized Education in assessing HEIs. This framework may have both qualitative and quantitative parameters.

4. There is a need to synergize the accreditation and ranking processes such that the overall quality of higher education in the country improves.

   • Accreditation and ranking are to attest to the adherence to certain criteria in terms of the outcomes achieved, accreditation signalling the bare minimum quality, and ranking signalling levels of excellence. This distinction between accreditation and ranking must be maintained.
   • NAAC shall focus on institutional accreditation (binary), and NBA shall focus on program accreditation (graded). Program accreditation shall be optional at the discretion of HEIs. However, HEIs shall not be allowed to use these grades in the public domain.
   • NIRF will develop the framework for ranking institutions at the national/state/regional levels. NIRF will become the wing responsible for ranking under NAC.

5. For input realisation across various institutions/universities in the system, a versatile national portal should be developed to capture all desired institutional data for accreditation and ranking in one platform.

   • The data compilation in the portal could be contextual – science, engineering, humanities, etc. The governance, transparency, delegation of powers (financial/administrative), good practices, and diversity – gender, ethnic, social, under privileged, etc. may also be a part of data collection.
• A proper mechanism of auditing (in addition to authentication or verification) the submitted data should be evolved by NAC. The “One Nation – One Data” idea will be central to implementing this strategy and will be crucial in reducing the HEI burden.

6. Various Institutes have been established with different visions and missions. The institutes may be located in different regions, urban, rural, tribal, etc. This has to be kept in mind during the development of the framework for accreditation and ranking.

7. A fair, robust, and transparent grievance redressal mechanism must also be put in place.

8. Even though the accreditation and ranking could be designed as voluntary exercises, it is a healthy practice for all HEIs in the system to go through the exercise periodically.

6.2 On the Framework for Rationalization of Accreditation and Ranking (Committee-2 of UGC)

This report outlines the ideal worldview of accreditation, both from the perspectives of the education institutions and accreditation agencies, followed by a similar outline of the perceived reality on these counts as it exists on the ground, pointing out several difficulties that are encountered and the distortions that result from that. Based on this appreciation, a few recommendations have been made for the National Accreditation Council, that might help it to address these issues and develop a framework for putting in place an enhanced and expanded system of accreditation for the country. The report presents this framework on the following 8-point approach:

1. Have a broad mandate that envisages evolving processes for the creation and approval of multiple accreditation bodies of high credibility at various levels and various domain areas by:

   (a) inviting institutions of eminence to consider the creation of such bodies under section 8,
   (b) inviting proposals from private parties with credible standards, and
   (c) requisitioning all approving bodies of HEI’s to oversee their creation in their respective domains.

   It should also set standards and guidelines for these accreditation bodies. These processes should cover both the overall monitoring of the standards and taking suitable actions where these lack rigor or effectiveness.

2. A Reliable Unique Data Repository that serves as a reliable resource for up-to-date and accurate data regarding all HEI’s as needed by various accreditation bodies and ranking organisations across the country.

3. Mandate quality protocols for the selection of experts who have the required qualifications and experience and the highest motivation and ethical standing, and also for their effective deployment in a manner that prevents distortions in the systems.
4. Encourage Creation of Model formats for development of self-assessment reports from the HEI's.

5. Model protocols for evaluation of education delivery and outcomes at the HEI's.

6. Rationalisation of accreditation practices across the board that enhance the quality even as they simplify the accreditation process as much as possible. These practices should include a binary accreditation decision, alignment of professional accrediting bodies with international alliances in their respective domains (e.g., Washington Accord for NBA), focus on program based accreditation for all programs in an institution or university, integration of institutional accreditation and program based accreditation etc.

7. Ensure Mentoring of Accreditation Experts for Accreditation, and Faculty for Improvement of Education Delivery.

8. Expansion of the Accreditation Network to encourage its diffusion eventually to include every higher education institution in the country by bringing it on the accreditation map of the country. This ambitious step will require a separate imaginative effort that provides for their eventual accreditation and also provides resources for their upward movement and empowerment.

6.3 On the ongoing NAAC methodology, global best practices, stakeholders’ feedback and the way forward (Committee-3 of UGC)

1. This Committee has taken cognizance of the fact that only 30% HEIs in the country, including Affiliated Colleges, are presently accredited thus leaving a long way to go. This Committee has further emphasized that in the current process, Quality & Excellence are the twin objectives: NAAC with graded institution-accreditation, NBA with binary programme-accreditation and NIRF with Overall/Subject Ranking.

2. The Committee has made a comparison in the accreditation as envisaged in the NEP 2020 and the existing accreditation systems adopted by NAAC. The Committee has carried out extensive stakeholder consultation with over 250 diverse HEIs and studied the global best practices.

3. The recommendations made by the Committee are based on the following classification criteria:

- PRE-ACCREDITATION: to include training and sensitisation; Simplification of data collection and upload – Incubation and mentoring; Minimum self-disclosure standards and compliance with scrutiny; Harmonious data integration with similar platforms; Smoothening of DVV deviances using statistical tools and interface agencies; Accreditation to be contextualised – Y/N Accreditation (Minimal standards – minimum data), Grades (Maximum standards – relevant data), Metrics (Calibrated standards to suit the HEI context); Ease of accreditation.
6.4 An audit for optimisation and future improvements in the assessment and accreditation system of NAAC (Audit Committee of the Chairman EC-NAAC)

This Committee had been mandated to conduct a review and extensive audit of the existing NAAC Assessment and Accreditation System with the following terms of reference:

(a) critically review and examine the entire end-to-end A&A process to know how the desired objectives are being served, the existence of work ethics, the possibility of conflict of issues and adherence to the laid down code of conduct;
(b) critically review and examine the role and responsibility of different authorities and committees involved in the A&A process for ensuring alignment to meet the objectives of NAAC; and
(c) identify key learnings and possible gaps from the internal team experiences and stakeholder feedback.

This Committee had visited NAAC during August 23-26, 2022, and prepared its report based on the observation of different processes of A&A then in practice at NAAC, interaction with the functionaries of NAAC, and the demonstration of the functioning of portal and its back end by ICT team of NAAC. This Committee analysed 10-15 samples of HEIs in detail.
Most importantly, based on this audit, this Committee has made a set of recommendations that have been categorized into Short Term, Mid Term, and Long Term, as follows:

<table>
<thead>
<tr>
<th>Short Term</th>
<th>Mid Term</th>
<th>Long Term</th>
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| • Implementation of immediate measures for improvements regarding current criteria, framework, key indicators, and weightage used in the A&A process;  
• Revision of benchmarks and manuals and making them available in the public domain;  
• Hosting of data on NAAC’s own Servers/Website;  
• Enhancement of pool of experts as well as engaging more new experts for PTV;  
• SSR assignment process to Coordinators to be made transparent/improved upon; and  
• To keep track of audit trail, entire IT services/tools/software, including DVV process, PTV selection and post PTV & result declaration, to be improved up in terms of intermediate records of changes and end logs. | • Mid-term measures involving reforms in online A&A process flow an IT infrastructure should be undertaken.  
• Establishment of a dedicated new body for DVV coordination would not only facilitate accreditation (rating) but also ranking (NIRF etc.) under the expected framework of One Nation One Data.  
• Creation of such an agency can be undertaken swiftly as some of the existing IUCs of UGC are already functioning effectively in similar domains of activities.  
• Creation of NAAC’s own Data Centre or use of Government/public cloud.  
• Enhancing the NAAC’s capacity for PTV’s by enhancing the enrolment of more Assessors/Experts or which the existing databases of Academies, IRINS/Vidwan Portal etc. may be pulled out automatically. | • The NAAC or any other such agencies should undertake the long-term planning based on the vision of NAC as envisioned in the NEP, 2020. For long-term planning, a much bigger framework of stakeholders (HEIs) should be consulted before any new policy/framework is devised. |
7. STAKEHOLDER CONSULTATIONS AND FEEDBACK

7.1. Stakeholder Consultations of 2022

The Committee-3 of UGC had conducted online consultative meetings with over 250 HEIs of different categories, i.e., Central Universities, State Universities, State Private Universities, Deemed-to-be Universities, autonomous and affiliated colleges (Accredited and Non-Accredited), spread across the country, covering all regions.

These interactions addressed:
(i) Current best practices of NAAC, (ii) Pre-accreditation preparatory challenges, (iii) Resistance to go for second and subsequent rounds, and (iv) Suggestions for reforms and improvement.

7.2. Feedback received from Stakeholders

The Committee-3 of UGC has observed that despite the various efforts to popularize and incentivize NAAC, the rate at which HEIs are accredited remains an area of grave concern. This can be attributed to several factors, the most important being the fear of failure, complexity of the process, and lack of assured incentives.

The outcomes of the stakeholder consultation include the following:

1. There is an overwhelming belief that Binary Accreditation is going to replace current accreditation grading & scoring patterns and that Binary is relatively easier. So, ‘wait rather than volunteer’ for accreditation in the current model, is the popular mood.

2. The context of the type of institution and its core purpose is not adequately reflected and quantified in the accreditation process and scoring. Inherent challenges like rural location, specific special objectives, philanthropic promoter and others are not calibrated or weighted in the scoring metrics.

3. Data collection exercise and requirement is voluminous and time consuming. Sometimes, it is very difficult to get data for certain parameters like alumni and placement for relatively less established institutions that do not have such formal data collection mechanisms.

4. The grading scales of 0-4 in the input level are stretched to decimal levels in the final scores, which tilt the results due to the wide difference in scales. Stakes are high and hence lack of provisions in the input level scores of the subjective Qualitative Metrics (QIM) and Quantitative Metrics (QnM) scores result in final scores and grades that make a huge difference.

5. The Data Validation and Verification (DVV) exercise is connected with the third party and HEIs. The role of NAAC is very limited and sometimes there is a lack of proper understanding of the data submitted by DVV partners.

6. The scores for Awards and so on involve subjective considerations.

7. There is confusion between NAAC ratings and NIRF rankings. HEIs as well as the general public are mixing these two concepts due to lack of clarity. This also gives rise to avoidable comparisons between the two systems, which are entirely different – NAAC is for HEIs Rating while NIRF is for HEIs Ranking.
8. The learning outcome, which forms an important scoring metric does not have a proper methodology to measure the various variables. The direct method of end-semester exams is not fully representative of learning outcomes, and more objective variables are needed.

9. HEIs that are accredited with A+ and A++ grades - Category 1 & Category 2 are not enjoying full autonomy as per provisions of the UGC Graded Autonomy Regulations.

10. There is an identifiable disconnect between the QnM and QlM scores, and the unexplained gap between the two needs to be reduced. Sometimes, HEIs are not willing to complete the DVV convincingly and hence there is a gap. It will help to revisit some of the QnM scores flagged as contentious during the Peer Team (PT) visits.

11. Hesitancy to re-accredit as also the move for first accreditation arises from the fear factor due to multiple score scales and the lack of appropriate support system to fill data, online submission being time and resource consuming for less endowed HEIs, data overload etc.

12. The PT composition lacks balance, especially in the university category. It is populated by members from public institutions with minimal private HEI representation. There needs to be a good balance between the two.

7.3. Public Consultation

For seeking public opinion/stakeholder consultation this draft report was uploaded on the ‘MyGov’ portal and ‘MoE’ website from 19th May, 2023 to 22nd June, 2023; later extended upto 15th July, 2023 and then again from 8th August, 2023 to 15th August, 2023. An Online Consultative Workshop on Reforms in Assessment, Accreditation and Ranking of Higher Education Institutions was also held on 7th July, 2023. The report was also discussed and deliberated in the thematic session on National Institutional Ranking Framework held during the Akhila Bharatiya Shiksha Samagam, 2023 on 30th July, 2023. About 1450 feedback have been received from various categories of stakeholders on the draft report.

After careful examination of the feedback received on the draft report after stakeholder consultation, it is observed that there is high level of support for the directions given in the matter. Several comments/views were received during the course of public consultations wherein simplification and rationalization of existing assessment/accreditation/ranking procedures, ensuring transparency through technology driven systems, assessment of institutions based duly considering the existing heterogeneity in the HEIs, outcome based assessments, ensuring Job oriented courses/Skill-based Outcomes etc. have been requested for incorporation.

The Committee has already considered the introduction of strategic reforms consistent with the vision of the NEP 2020 and the need for adopting a simple, trust-based, objective and rationalized system for approval, accreditation and ranking of Higher Education Institutions with a verifiable and secured centralized database through technology-driven modern systems. The concerns raised have been appropriately considered by the Committee during the meeting held on 25th September, 2023 and incorporated in the report.
8. GLOBAL BEST PRACTICES ON ACCREDITATION

The Committee-3 of UGC had made the following observations, after a detailed study and analysis of certain best practices that are followed by accrediting agencies in advanced nations like USA, Canada, Europe, Australia and Japan.

01 Accreditation is mandatory in many countries not only for awarding degrees but also for practising engineering as a profession.

02 The outcomes are predominantly binary: i.e., acceptance or different shades of rejections. In some cases, the accreditation request can be outright rejected, or a university can be given more time to comply with the requirements.

03 Student learning outcomes are measured by the perusal of students’ exam scripts, the difficulty of questions, and grades. Student interviews in the on-site assessment are also used to calibrate learning outcomes.

04 Accreditation agencies base their assessment of student and faculty satisfaction using surveys. To ensure their veracity, interviews are often conducted on an anonymous basis without any interference from the university.

05 The forms are very brief and simple.

06 All important documents, such as the details of facilities, faculty profiles, student strength (at different levels), curricula, teaching plans, lectures, and assignments are in the public domain at all points of time with the strictest adherence to compliance norms and stringent action against errant institutions.

07 Public display of learning outcomes for stakeholder independent assessment and scrutiny is a regular practice.

08 The accreditation fee is fairly high when compared to India but the level of engagement and mentoring is fairly mature and scientific at all stages – pre-during-post accreditation process.
9. TRANSFORMATIVE REFORMS PROPOSED FOR INDIA’S HEI-APPROVAL, ACCREDITATION AND RANKING SYSTEM CONFORMING TO NEP 2020

9.1. Strategic Intent

Consistent with the Vision of NEP 2020, adopt, right away, a simple, trust-based, credible, objective and rationalised system for approval, accreditation and ranking of HEIs, with

- a verifiable and secured centralised database,
- technology-driven modern systems that could replace/minimise manual involvement
- mentoring and incentivising schemes for raising their participation as well as accreditation levels, towards eminence, significance and global acclaim.

9.2. Specifics of the Proposed Reforms

1. Transition from the present 8-point grading system of NAAC to an ‘Adapted Binary Accreditation System’ is proposed, two sub-divisions in the Non-accredited category, as given below.

<table>
<thead>
<tr>
<th>Binary Accreditation (envisioned in NEP 2020)</th>
<th>Adapted Binary Accreditation (proposed by this Committee)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Accredited</td>
<td>• Accredited</td>
</tr>
<tr>
<td>• Not Accredited</td>
<td>• Awaiting Accreditation (i.e. on the threshold for Accreditation)</td>
</tr>
<tr>
<td></td>
<td>• Not Accredited (i.e. far below the standards for accreditation)</td>
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</tbody>
</table>

2. Encourage accredited institutions to raise their bar gradually to:

- ‘Level 1’ to ‘Level 4’ of Institutions of National Excellence, [moving up as they evolve ‘in-depth in their disciplines’ and/or in-breadth in disciplines]
- ‘Level-5’ Institutions of Global Excellence for Multi-Disciplinary Research and Education (as envisioned in NEP 2020)

This classification could be a necessary condition for graded autonomy.
3. Enable Choice-based Ranking System for Diverse Users

Potential users (students, funding agencies, industries etc.) could be enabled to make a more informed choice for studies, research and consultancy. Towards this, in-built tools need to be provided to process and refine the above vectored scores (that are based on gross parameters) with user-specifiable weightages and selectable parameters.

4. Amalgamate Programme-Accreditation and Institution-Accreditation, considering their inter-dependency; and evolve a Composite Assessment System (with due compliance to the accepted conditions of the Washington Accord)

Parameters and threshold levels for the scores on institutional assessment and each of the programmatic domain assessments may be specified. A standardized list of programmatic domains may be drawn up.

The composite assessment may be provided as a composite table for each HEI, or in Infographics e.g. ‘Star Plots’ (a sequence of equiangular spokes representing major programmatic domains, and their length proportional to the rating of each domain), with a central core circle scaled to the institutional base.

In this composite assessment, it is possible that a typical HEI may get high scores for a few programmatic domains and relatively low for the rest of the domains. Accreditation scores are paramount than the rankings

When data is collected on more than one variable, star charts are used to illustrate and represent the multivariate data. The star plots assist in identifying the dominant variable, identifying similar observations and detecting outliers. Each of the variable measures some property of the observations and such plots assist in assessing the relative values of a single data point. This in turn facilitates finding and locating the comparable and dissimilar points. The length of the equiangular spokes, which reflect an observation’s value on the variables, is proportional to the magnitude of the variable at that point in relation to the variable’s maximum data point. All the data points are connected by a line to represent the plot.

5. Mentor the Institutions falling ‘far below the standards for accreditation’

HEIs from the accredited group may be encouraged to become mentors, with suitable credit given during their re-accreditation.

6. Simplify the Accreditation process, especially for the first cycle and Periodicity for Re-accreditation may be brought down (from five years as followed now).

Once the HEI gets accredited in the first cycle, the existing stipulation for annual re-approvals (that is followed by AICTE through an on-line process now) may be eliminated, provided that the scope of the programme (content, seats) does not alter significantly (the allowable bands may be specified).

Further, considering that the NEP 2020 envisions that the undergraduate degree will be of either 3 or 4-year duration, with multiple exit options within this period, and UGC has already taken steps for implementation of these provisions, the Committee decided that six years shall be the mandatory defined periodicity for institution accreditation cycle. However, flexibility needs to be ensured in the system, so that an institution can opt for re-accreditation at any point of time based upon their specific levels of preparedness.
7. Include all HEIs and every programme in the newly proposed assessment and accreditation system with due regard for their statutory dispensations (e.g. IITs).

The process of encouraging IITs to migrate from their internal peer review system to an appropriate national accreditation system is on the anvil.

8. Consider the heterogeneity of HEIs in the country, categorise them based on their orientation/vision and heritage/legacy, and then seek information from the HEIs that are appropriate for their category (rather than a one-size-fits-all model in vogue currently).

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Suggested Category of HEIs</th>
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<tbody>
<tr>
<td>Orientation and Vision</td>
<td>• Multi-disciplinary Education and Research-Intensive</td>
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<td></td>
<td>• Research-Intensive</td>
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<td></td>
<td>• Teaching-Intensive</td>
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<td></td>
<td>• Specialised Streams</td>
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<td>• Vocational and Skill-Intensive</td>
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<td>• Community Engagement &amp; Service</td>
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<td></td>
<td>• Rural &amp; Remote location</td>
</tr>
<tr>
<td>Heritage and Legacy</td>
<td>• Old and Established</td>
</tr>
<tr>
<td></td>
<td>• New and Upcoming</td>
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</table>

(Note: # More categories may be added as required).

9. Accredit with due consideration for Inputs, Processes, Outcomes and Impact across different attributes of HEI, encompassing (i) Curriculum (ii) Faculty Resources (iii) Learning and Teaching (iv) Research and Innovation (v) Co-curricular and extra-curricular activities (vi) Community Engagement, (vii) Green Initiatives (viii) Governance and Administration (ix) Infrastructure Development (x) Financial Resources and Management

**Input-Process-Outcomes-Impact for different attributes of HEIs**

The parameters and related variables in current use (by AICTE, NAAC and NBA, and to a large extent by NIRF) are largely ‘input-centric’. Hence, a framework for addressing the four elements (Input-Process-Outcomes-Impact) of each attribute is addressed in this Report (Appendix-1).

**Linking Applicable Parameters and Essential Variables involves**

- evolving a harmonised set of parameters linked explicitly with the Inputs, Processes, Outcomes and Impact pertaining to each of the 8 (or more) attributes for each category of HEIs,
- identifying a simplified superset of the essential variables that would be truly indicative of such parameters, and
- assigning weightages (business logics) for the varied purposes of approval, accreditation and ranking.

[Note: The required actions are underway in mission-mode by respective agencies]
10. Develop a ‘Unified Elicitation Tool’ to collect the superset of data from HEIs for varied purposes (of approval, accreditation, ranking) with in-built design for collateral cross-checking to ensure authenticity of data, and, in conjunction with it, introduce maximally the technology-driven modern systems, to replace the existing manual/hybrid systems of assessment and accreditation there by minimising subjectivity and enhancing transparency and credibility.

11. The proposed ‘One Nation One Data Platform’ detailed in Appendix-2, may be upgraded to a robust architecture to provide:

- adequate access control and security features,
- ingestion of harmonised data (with due quality checks) into a single format (with the applicable essential variables),
- single point data entry by HEIs with provision for yearly updates (enabling ‘ease of doing business’ for HEIs),
- flexible and robust data management scheme with ‘business logics’ for the varied purposes of approval, accreditation and scoring/ranking,
- handling of collateral data and stakeholder crowdsourcing for verification of input data and trust-enhancement measures (replacing the current manual verifications and minimising dependence on visit of personal teams),
- application programming interfaces (APIs) for pushing data from varied sources into the centralized database that is being developed, and
- compatibility with the national digital framework for good governance (e.g. NDEAR, InDEA 2.0 and GATISHAKTI), future digital campus of HEIs (e.g. SAMARTH, Swayam 2.0), as well as AISHE Portal, Digilocker and Academic Bank of Credits (ABC).

Feasibility of upgrading of ‘One Nation One Data’ Platform has been ascertained [Note: The required actions are underway in mission-mode].

12. Trust the Institutions (along with significant penalty for wrong submissions) and ensure public disclosure of relevant data by HEIs to enhance the overall process-credibility.

Micro-management of assessment and accreditation of HEIs may be avoided. There is a need to start with a paradigm that HEIs are responsible and capable agencies who display their data/outcomes claims in their portals for public viewing. Humility and pride should form the basis for regulatory excellence.

13. Initiate a robust outreach mechanism in tandem with effective methods of handholding the potential entrants (which is the large majority now), where the aim should be to facilitate all HEIs in the count towards joining the process of accreditation and ranking at the earliest.
10. FURTHER WORK AND TARGETS FOR TRANSITION

A. STAGE-I (Short-Term)

1. Capture and Validate Common Data Used by All Agencies

It is proposed to implement ONOD (One Nation One Data) platform to capture the common data used by all the agencies (AISHE, UGC, AICTE, NAAC and NBA/NIRF) before the end of December 2023 with the following features:

- All stable variables used by all agencies to be captured and validated
- Common Dynamic variables such as programmes, students and faculty to be captured and validated

The above features of ONOD shall help the HEIs and the agencies (AISHE, UGC, AICTE, NAAC and NBA/NIRF) to largely reduce redundant efforts and errors, and to achieve a single version of truth.

2. Introduction of Binary and Maturity-Based Graded Accreditation (Level 1 to 5)

NAAC to launch the Binary and Maturity-Based Graded Accreditation immediately by making suitable changes in the manuals (metrics, measures, benchmarks, etc) as detailed below:

The Binary grading shall be largely based on quantitative assessment with very minimum review through an online mode wherever required. Peer Data Validation (PDV) shall be adopted to validate the data for Binary grading including the Awaiting Accreditation category.

Incorporating the global practice of qualitative peer assessment, the proposed Maturity-Based Graded Accreditation methodology shall include qualitative Peer Experts Assessment (PEA). However, the formation for PEAs shall be based on the maturity level for which the HEIs are assessed.

The features of NEP 2020, SDG/G20 and other national priorities articulated through various Ministries and Departments of Government of India are required to be incorporated in the manuals along with fundamental focus on process, outcomes and impact dimensions of quality.

NBA shall take efforts to have optimum level of quantitative assessment within the broader stipulation of Washington Accord.

Note: The agencies are required to take the approval of the competent authorities and committees for implementing within a stipulated time period.
B. STAGE-II (Medium-Term)

1. Capture and Validate Entire Super Set of Data Used by All Agencies

It is proposed to expand the ONOD (One Nation One Data) platform to securely capture and manage the entire super set of data used by all the agencies (AISHE, UGC, AICTE, NAAC and NBA/NIRF) with the following features:

• The data validation will be carried out by the involved agencies collectively using appropriate methodology. Two-way APIs shall be used by ONOD to manage the entire super set of data with high level of integrity and security. All agencies shall use the data from ONOD platform for carrying out the Approval, Assessment and Ranking.

• In addition, for improving the validity and reliability of the data submitted by the HEIs, a novel “Stakeholder Crowdsourcing” methodology has been proposed. The Stakeholder Crowd shall include students, faculty, alumni, industry, parents, and academic & scientific peer groups - effectively society at large, as part of the accreditation and ranking process.

Note: The agencies are required to continuously review the broader requirements of NEP 2020 and propose suitable changes in the methodologies and take approval of the competent authorities and committees for implementing reforms in a phased manner.
APPENDIX 1 - PROPOSED FRAMEWORK FOR ADDRESSING PARAMETERS PERTAINING TO INPUT, PROCESSES, OUTCOME AND IMPACT

(i) Curriculum

<table>
<thead>
<tr>
<th>Input</th>
<th>Process</th>
<th>Outcome</th>
<th>Impact</th>
</tr>
</thead>
</table>
| Source of the content which is open for public viewing in their portals | • Students’ Feedback  
• Teachers’ Feedback  
• Stakeholders’ involvement  
• Method of periodic upgradation  
• Review mechanism  
• Transparent responsible and inclusive methods of functioning  
• Expanding access to high-quality Technical and Vocational Education and Training (TVET)  
• Emphasizing the importance of enabling life-long learning focused on skillling, reskilling, and upskilling especially for vulnerable groups  
• Encourage mobility of students, scholars, across higher education institutions | • Successful completion of Course (Passing)  
• Updated knowledge  
• Time management catering to the needs of the semester system  
• Innovative ideas/ways of exercising policies/patents/high impact publications, books  
• Teaching content contextualised leading to real-world skillling in the learners  
• Enable personal accomplishment and enlightenment, constructive public engagement, and productive contribution to the society  
• Multidisciplinary and holistic education | • Progression towards higher level of education educated-ness in the society  
• Increased possibilities skilled work-force leading to placement or self-generated jobs  
• Rise of/involvement in entrepreneurship/innovations  
• Awards/recognitions/Inventions/Wealth generation  
• Prepare students for more meaningful and satisfying lives and work roles and enable economic independence |
(ii) Faculty Resources

<table>
<thead>
<tr>
<th>Input</th>
<th>Process</th>
<th>Outcome</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications received</td>
<td>• Shortlisting procedure</td>
<td>• Merit-based selection with due importance to equity and diversity</td>
<td>• Student progression towards higher level of education in good</td>
</tr>
<tr>
<td></td>
<td>• Personality aspects</td>
<td>• Reflection in career path of students</td>
<td>institutions/professional life/social acceptance and moulding them to</td>
</tr>
<tr>
<td></td>
<td>• Pedagogy</td>
<td></td>
<td>be responsible citizens of the nation.</td>
</tr>
<tr>
<td></td>
<td>• R&amp;D aptitude</td>
<td></td>
<td>• High quality faculty that contribute towards the implementation of</td>
</tr>
<tr>
<td></td>
<td>• Constitution of Selection Committee</td>
<td></td>
<td>NEP 2020</td>
</tr>
<tr>
<td></td>
<td>• Integrated Score with appropriate weightage</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Continuous professional development of teachers through the Malviya</td>
<td></td>
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<tr>
<td></td>
<td>Mission Programme and other similar programmes approved by UGC/AICTE</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>with appropriate weightages</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>• Appropriate consideration of faculty selection parameters (e.g.</td>
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<tr>
<td></td>
<td>Professional skills like performing arts, visual arts; writing case</td>
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<td></td>
<td>studies for management institute faculty) and practical based</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>selection</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Consideration of parameters for ensuring social inclusivity measures</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>in the HEIs (gender parity/disabled/trans-person/SDGs) with</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>appropriate weightages</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### (iii) Learning and Teaching

<table>
<thead>
<tr>
<th>Input</th>
<th>Process</th>
<th>Outcome</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversity of content &amp; contemporary issues in content delivery</td>
<td>• Normal classroom practice (Top down approach) &lt;br&gt; • Interactive method/collaborative/contextual learning &lt;br&gt; • Field work &amp; evaluation &lt;br&gt; • Experiential learning &lt;br&gt; • Critical, ab-initio thinking and problem solving methods &lt;br&gt; • Inculcating research oriented study &lt;br&gt; • Cultivating deeper interest in the subject to spur learning by self-efforts &lt;br&gt; • Harnessing digital technologies to overcome the digital divides for all learners &lt;br&gt; • Promoting open, equitable and secure scientific collaboration across research and higher education institutions</td>
<td>• Holistic and contextual understanding of the subject and impact of learning in life &lt;br&gt; • Need to have a benchmark of learning outcome &lt;br&gt; • Promotion of research activity and new areas of thoughts &lt;br&gt; • Developing the aptitude of connecting insights across domains</td>
<td>• Attainment of learning outcome, progression in studies &amp; profession &lt;br&gt; • Contribution towards different areas of learning/research through new and innovative critical ideas and thoughts &lt;br&gt; • Promotion of self-sufficiency &lt;br&gt; • Creating confident citizens</td>
</tr>
</tbody>
</table>
### (iv) Research and Innovation

<table>
<thead>
<tr>
<th>Input</th>
<th>Process</th>
<th>Outcome</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>• New imagination&lt;br&gt;• New problems in research&lt;br&gt;• Proper policy for promotion of research and research facilitation.</td>
<td>• Interdisciplinary approach.&lt;br&gt;• Collaborative approach.&lt;br&gt;• Research addressing local and regional issues of societal concern &amp; global issues like climate change and world economy&lt;br&gt;• Out of the box and fearless thinking that reduces the ‘fear-of-failure’ barrier to develop sensitivity towards diversity in the society&lt;br&gt;• Promoting open, equitable and secure scientific collaboration and encouraging mobility of researchers and scientists across research and higher education institutions</td>
<td>• Publications.&lt;br&gt;• Patents.&lt;br&gt;• Participation of collaborative institutions in research&lt;br&gt;• Translational work</td>
<td>• Increase in Citations&lt;br&gt;• Peer group recognition&lt;br&gt;• Stake-holder impact&lt;br&gt;• Better funding of research by industry and other agencies.</td>
</tr>
</tbody>
</table>

### (v) Extracurricular (EC) and Co-Curricular (CC) Activities

<table>
<thead>
<tr>
<th>Input</th>
<th>Process</th>
<th>Outcome</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit for EC/CC activities</td>
<td>• Incentivization (financial etc.) and special focus to marginal sections&lt;br&gt;• Logistic, connecting to the syllabus</td>
<td>• Holistic concepts of institutional learning&lt;br&gt;• More complete realization of human potential</td>
<td>• Representation of students in national/larger bodies&lt;br&gt;• Creates an eco-system that uncovers innate talents in the society</td>
</tr>
</tbody>
</table>
### (vi) Community Engagement

<table>
<thead>
<tr>
<th>Input</th>
<th>Process</th>
<th>Outcome</th>
<th>Impact</th>
</tr>
</thead>
</table>
| • Curriculum & engagement with society.  
• Outreach activities  
• Projects/internships executed on real-world problems | • Social outreach and Community Engagement  
• Involvement of students to connect with society in the context of curriculum  
• Social research in collaboration with concerned bodies  
• Adoption of nearby institutions, bodies or villages.  
• Exchange programmes | • Understanding the relevance of curriculum for effective social and community engagement.  
• Increased involvement of the students in the societal level and realizing their sense of responsibility as a social being. | • Better acceptability of the institutions by society  
• Community improvement in terms of health, education & economic upliftment. |

### (vii) Green Initiatives

<table>
<thead>
<tr>
<th>Input</th>
<th>Process</th>
<th>Outcome</th>
<th>Impact</th>
</tr>
</thead>
</table>
| Credit for Green Initiatives | • Use of renewable energy  
• Waste Management.  
• Environment friendly initiatives, e.g., Green building, Eco restoration  
• Spreading awareness among stakeholders.  
• Rain water harvesting and water recycling  
• Appreciation towards the importance of achieving SDGs rapidly | • Orientation towards environmental friendly actions.  
• Shift towards renewable energy. | • Reduction of carbon footprint |
<table>
<thead>
<tr>
<th>Input</th>
<th>Process</th>
<th>Outcome</th>
<th>Impact</th>
</tr>
</thead>
</table>
| Act, Statutes, Regulations, Policies      | • Implementation conforming to Act, Statutes, Regulations, Policies.  
• Amendment procedure.                                                                                                               | • Better conflict resolution                                                               | • Transparency in Governance                                                               |
| Mission to achieve the vision.            | • Innovation in Governance to be evaluated based on Implementation of eGovernance, Decentralisation, participative management strategies.  
• Implementation of the G20 High-Level Principles on Lifestyles for Sustainable Development (LiFE) with appropriate weightage  
• Appropriate weightage for availability of an effective Grievance Redressal Mechanism and resolution of complaints  
• Appropriate weightages for performance related statistics like increase in enrolment, gender parity ratio, SC/ST/OBC/EWS Student enrolment  
• Appropriate weightage for strategies adopted for promotion of internationalization of education (e.g. UGC (Academic Collaboration between Indian and Foreign Higher Education Institutions to offer Twinning, Joint Degree and Dual Degree Programmes) Regulations, 2022, Study in India programme) | • Level of Implementation with examples in different area.  
• Increased GER                                                                                | • Timeline of execution of administrative tasks  
• Helps in better management of the institution and its admin  
• Restoration of India’s role as a Vishwaguru                                                 |
### Infrastructure Development

<table>
<thead>
<tr>
<th>Input</th>
<th>Process</th>
<th>Outcome</th>
<th>Impact</th>
</tr>
</thead>
</table>
| Infrastructure Development   | • Details of land, classroom, research laboratory, computer centre, workshops, restaurant, theatre, dining hall, library, administrative office, faculty rooms, central stores, security, housekeeping, examination control office, placement office, common room, first aid cum sick room, guest house, sports club/Gymnasium, auditorium, hostel  
• Logistics for infrastructure for connecting to the students, faculty and staff | • Holistic view of the existing capabilities of the institution.  
• Judgement of capabilities for expansion             | • Better outcomes from students and their academic courses  
• Creates an eco-system that ensures that a healthy development of courses, students, faculty, and staff takes place. |

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(ix) Infrastructure Development
<table>
<thead>
<tr>
<th>Input</th>
<th>Process</th>
<th>Outcome</th>
<th>Impact</th>
</tr>
</thead>
</table>
| Financial Resources & Management           | • Seed money for teachers, students and researchers  
• Support for conferences, workshops, equipment, research etc. to students, teachers and researchers.  
• Amount spent on developing facilities, library, e-resources, labs, training teachers and staff for undertaking outreach activities  
• Amount spent on salary of teaching and non-teaching staff  
• Amount spent on Seminars/Workshops/Conferences  
• Expenditure on infrastructure augmentation  
• Amount received in donation and CSR funds  
• Revenue generated from outreach activities  
• Total amount spent on developing facilities, training teachers and staff for undertaking outreach activities  
• Utilized amount on library, labs, workshops, other expenditure, salary of teaching and non-teaching staff, maintenance of infrastructure, consumables, Seminars/Workshops/Conferences, each value given separately for each of the last 3 financial years | • Detailed overview of the financial health and existing capabilities of the institution.  
• Judgement for expansion of the institutes | • Better judgment about the outcomes from student, faculty and researchers  
• Creates an eco-system that ensures that a healthy development of student, and faculty can be correlated |
APPENDIX 2 - ARCHITECTURE OF A COMMON PLATFORM AND A BRIEF ON UPGRADEATION OF ‘ONE NATION ONE DATA’ PLATFORM

1. Hardware platform architecture

The hardware should be designed to operate on a cloud architecture – preferably a Government owned one. It must be protected from various kinds of malware attacks. The access to this hardware (or the VMs) should be only through a software system with a strict, well designed access control.

At present, there is perhaps no major requirement for 24X7 access since this is not envisaged as a transactional system. However, it is anticipated that such requirements shall also be in place in the near future. It is therefore envisaged that the cloud data centre should be equipped with all the necessary servers, and should work with a cloud orchestration layer providing services such as virtual machines, data and service separation and API driven access to the various possible views of data. No data storage architecture, database engine layer and other similar direct access layers to data may be abstracted in the form of API layer so that the implementation is better engineered with largely independence of database engines, efficient through load balancing approaches and functional even during the updates of services and software.

2. Security Architecture

Needless to say that data collected on a central platform needs to be secured so that the hardware infrastructure remains accessible to users when needed. It needs to have protection against malware so that the services remain available and no denial of services takes place - partially or fully. In addition, the privacy and access control to the software running on the platform is essential.

Next, comes the data access layer which would ensure that the access of data will be available to the genuine applications and users. Direct data access through the database engine should be discouraged as much as possible or it should not be there at all, if possible.

Further, software access control should be implemented which shall make the software services accessible only to the legitimate users. It will require user authentication which will be carried out at the software access layer Then, based on the user authentication, will provide services on the basis of the roles/privileges.

3. Access Control Mechanisms

Secured web service will create interfaces for data submission and access, based upon rights accorded to different agencies. Each agency will have their own view. They will operate with the interface provided to them as per access control policy defined by MoE.
4. Data Adaptation layer

This layer will ensure a flexible data management scheme. It will enable:

- Storage of data in the XML format in NoSQL database. NoSQL databases have an application-centred approach and can have their structure modified on the fly as database use key-value pair. The other variants could be: Key-value Database, Document Database, Column Database.
- Handling variety of data - structured, unstructured (documents) – all will use XML representation
- Flexible and schema-less data model
- Data Model can evolve with new requirements
- Each data (value) corresponding to it could be assigned a key that would be unique in nature.
- Can be used to store any arbitrary data, integer, a string, an array, or an object (document, image, etc.).
- Easy for Integration with Geo-Spatial Data
- Reuse of data from earlier filled data - with possibility of editing so that only the changes are captured. This aligns with the ease of doing business goal.

An example of complex data which can be stored easily in the NoSQL database is Program Outcome. This can be represented (similar to the present NBA format) as: PEO-PO Matrix; PO-CO Matrix. Assessment will be a matrix derived function.

5. Software Interface Architecture

Software architecture will have Application Layer, Data Access and Ingestion Layer and Data Layer with role based authenticated access modality.

- Application layer will create end user specific views for data input and output. These views will be generated through a rule engine which will encode business rules for each application.
- Data updates and delivery will be through the data ingestion layer which will ensure consistency and validity.
- Data field will have temporal stamp and well-defined validity period (as some data needs to be collected annually, some data needs to be updated every three years, whereas some data can be updated anytime).
- The Stakholder-Crowdsourcing Module (discussed in the next section) will be interfaced to the application layer.
- Application layer will provide the relevant interface for the ingestion layer for appropriate update of the data field.

Key features of the architecture are as follows:

- Flexibility: Can accommodate heterogeneous data that requires no structuring. They are flexible in terms of their usage and reliability
- Reliability: Data can be stored across multiple sites including mirror sites for ensuring high failure-safe availability
- Robustness: The data should be secure, infallible to external attacks, readily accessible without glitches even by the authentic (but less-trained) users
- Application Based Query Interface
- NoSQL ensures Eventual Consistency, No strict ACID property enforcement
- Rule Engine for Business Logic for different Applications
• Retrieving data within objects embedded with XML or mark-up languages allows one to use object inheritance or interfaces that give far greater flexibility for data formats
• NoSQL databases allow one database to serve both transactional and analytical workloads from the same database.
• Analytical workload will be critical for policy formulations and ranking
• Deploying databases at scale in a way that supports micro services is often easier with NoSQL databases
• NoSQL databases also support polyglot persistence, the practice of mixing various types of NoSQL databases (document, graphs)
• Security: Application-centric way which will involve Encryption, Authentication, Authorisation processes

6. Building Trust in Data through Stakeholder-Crowdsourcing

Stakeholder-Crowdsourcing has been proposed as a methodology for validation of data submitted by the institute HEIs. In particular, data fields which are based upon feedback of stakeholders, crowdsourcing will provide an efficient way for collection of data. Further, it will provide an option for active and wider participation of stakeholders like students, faculty, alumni, industry, parents, academic & scientific peer groups - effectively society at large, in the accreditation and ranking process. This will minimise the need for physical visit of experts panel for data validation.

Stakeholder-Crowdsourcing will be used for those key data items which would require verification and/or feedback from the stakeholders. It is pertinent that a carefully chosen set of stakeholders with diverse association with the concerned institutes will constitute the pool of stakeholder crowd. The specific pool will be decided based upon the data item being considered. For example, assessment of programme outcome will involve alumni as one of the target pool. Target individuals will be chosen randomly from the alumni data provided by the institute. Data quality is of paramount importance in crowdsourcing. A mechanism for assessing confidence to crowdsourced feedback will be in place in the platform.

Crowdsourcing is being increasingly used for diverse purposes such as data collection, generating ideas, user testing, citizen journalism etc. Systematically sourced responses from the crowd can be a useful resource for the verification of data submitted by the Institutes into the integrated database for approval, accreditation and ranking. Education Ecosystem Registry which is under preparation by NETF will build trust in the education ecosystem as a single source of truth about students, faculty, educational institutes, and edutech companies and start-ups, which in turn will help further in building stakeholder crowdsourcing solutions, and trust in the system.

This would entail providing a short survey to the target crowd with respect to the authenticity of the claims (information) submitted by the institutes. The following crucial points need to be considered in designing the crowdsourcing based data verification system.

6.1 Identification of the data fields to be Verified

The data fields to be verified need to be carefully chosen so as to contextualize the survey questions. The effort required to answer the survey needs to be minimized for maximum participation from the crowd and hence the survey should be designed with an effort to provide binary answers with an option for additional explanation. The exact design of the survey will depend on the data fields to be verified and concerned crowdsourcing platforms should be consulted for the same.
6.2 Target Stakeholder Crowd

It is pertinent that the data is verified from a carefully chosen set of audience with diverse association with the concerned institutes. This may include: Students (including PhD and Post-doctoral scholars), Faculty, Staff, Alumni, Official Visitors such as selection committee members, Employers of the students, Internal Experts and Agency-appointed experts.

The target stakeholder-crowd should be chosen randomly from a pre-set pool of participants that will be maintained for every Institute that submits the data. The survey questions targeting verification of specific data fields need to be customized based on the target stakeholder crowd for maximizing the participation. For example, the outcome-based fields should be verified using inputs from alumni and employers of the graduates from the Institute (industry, postdoctoral mentors, academic institutions etc.). Invulnerability to misuse of different kinds is important.

6.3 Stakeholder-Crowdsourcing Platform and Data Management

Multiple crowdsourcing platforms and solutions have been developed over the last decade or so for various applications pertaining to crowdsourcing. The exact platform for crowdsourcing and data management of the responses received can be either through in-house development or can be outsourced to any of the commercial platforms.

6.4 Incentivizing the Participation

The success of using stakeholder crowdsourcing as a means for data validation will depend on the active and honest participation of the target crowd. This needs to be addressed by developing an incentivization mechanism for the stakeholder crowd. The nature and means of incentivization can be further deliberated upon by the implementation agency.

6.5 Ranking and Reputation Assignment

Data quality is of paramount importance in stakeholder crowdsourcing and hence there needs to be a mechanism to assign reputation to the individual participant by matching the responses to the final confidence score (validated by experts). A voting-based system where correct responses from each participant not only add to the confidence of the data but also the reputation of the participant may be considered.

Another mechanism for data quality assessment from the stakeholder crowd can be two independent randomized sets of participants validating the same data field. This would be more relevant to validation of outcome based data fields.

6.6 Assigning Confidence Scores to the Data Fields

The verification can be a dynamic process with each field being described in different quantized states of confidence. For example, the data submitted by the institutes can be considered at the lowest level of confidence and assigned a letter grade accordingly. Once the verification has been done by collecting responses using stakeholder crowdsourcing, the letter grade may be changed to a positively assigned value (+) or negatively assigned value (-) depending on the outcome of the responses. The final grade corresponding to confidence of the field can be given by an expert based on all the evidence at hand.
6.7 Verification of Sample data set by Experts

Even with implementation of rigorous stakeholder crowdsourcing, a physical/virtual verification of data by experts on a smaller sample is recommended. This can be followed by strict punitive measures for violations or inconsistencies between the claims and expert review. This will act as a deterrent for future violations. Besides, a time-bound process may be put in place for redressal of related grievances.

7. Vectored Data on Assessment Parameters

The aim of the integrated data collection and management for approval, accreditation and ranking should be to utilize the same set of data submitted by various institutions for different purposes based on the diverse vectors generated from the same data. This can be done by assigning different weightage for different data fields depending on the use of data for different purposes. For example, the outcome based data fields will be more relevant for accreditation and ranking purposes while input and process based parameters would be more relevant to the approval purposes.

The assessment parameters should be available in a gross category by using the values of the parameters including the trust scores. The vector data among various gross categories such as teaching, research, publications, IP, outcomes, placements, further education enrolment etc., inputs such as faculty, funds, labs etc., and outcomes to input ratios etc. can be made available as a vector. Using this, the following operations can be carried out.

• Accreditation by the appropriate agency which shall use the vectored information and a mix of these vectored outputs to define the outcome in the three categories.
• Assessment by the appropriate agency to perform the assessment of the HEIs or of the programs.
• Ranking by the appropriate agency to compute a score based on the weights of the vectored scores and ranking them based on the score. Even the raw score may be given out as it shall provide a perception of closeness of two institutes which the ranking system fails to do as it only provides an order.

8. Choice-based Ranking System for Diverse Users

While the system will provide the vectored score based on the gross parameters, and can be used by agencies to provide a composite score based on the weightages and parameters to be considered, the same may also be made available as a tool for people/agencies to devise their own ranking framework and get the rankings. A potential student may then be able to make a more informed choice based on his/her preferences. It is recommended to provide the scores corresponding to several parameters for each institution instead of a single overall score so that the users of the ranking (students, funding agencies, industries etc.) can rank the institutions based on the parameters of their choice and preference.
9. A Brief on ‘One Nation One Data’ Platform

The development of the One Nation One Data (ONOD) Portal aims at establishing a unified data architecture for augmenting the efficiency and transparency of the Approval and Accreditation a Ranking processes of Higher Education Institutions in the country.

9.1 Features of ONOD

The ONOD platform allows for singular capture of all the information sought from HEIs from diverse entities and thereafter enables the sharing of only relevant data fields to Approval and Accreditation Agencies. Further, IT enablement by use of embedded business logics of the approval workflows, derived data metrics used for evaluation, external observer visit feedback etc. seeks to ease the burden on HEIs, promote authentic data reporting and thereby an efficient and transparent HEI quality regulatory framework.

The platform provides a single window access to the database of higher education institutes existing in the country with Open API integration to allow for sharing of only user consented and required information with entities. The ONOD portal seeks to address the duplication of efforts on the end of education institutions in collecting the correct and reliable information on various parameters eliminating the prospect of any error or fraudulent information. This would help in increasing the efficacy and efficiency of the institutes and government by acknowledging the true state of educational institutes and planning long term expansion of capacity and infrastructure. Further, it would assist in improved decision making by students, faculty and parents while deciding the institution for enrolment.

The inclusion of stakeholder crowdsourcing verification frameworks, individual trust score and HEI accountability score shall also allow HEI incentivization for authentic data reporting. ONOD shall also emit anonymized data stream to extant analytics NDEAR building block - VSK Vidya Samiksha Kendra for data driven decision making in addition to development of AI/ML predictive modelling capabilities. Strategic data analytics shall allow the Government to more accurately estimate current capacities and identify gaps in order to plan future expansion and funding in order to standardize high quality, inclusive and equitable learning opportunities.
Annexure-1 : MoE Order (3 Nov 2022) setting up this Committee

Annexure-2 : MoE Order (3 Jan 2023) setting up a Sub-Committee of Specialists
ORDER

Subject: Committee for strengthening the Assessment and Accreditation of Higher Educational Institutions.

The Government of India constituted a Committee for strengthening the Assessment & Accreditation of Higher Educational Institutions vide Order of even No. dated 02\textsuperscript{nd} November, 2022. The Composition of the Committee may be read as follows:

(i) Dr. K. Radhakrishnan, Chairman
Chairperson BoG, IIT Kanpur &
Chairperson, Standing Committee of IIT Council.

(ii) Prof. Mridul Hazarika, Member
Vice-Chancellor,
Mahapurusha Srimanta Sankaradeva Viswavidyalaya,
Assam.

(iii) Prof. Bharat Bhasker, Member
Professor, IIM Lucknow
Lucknow.

(iv) Joint Secretary, D/o HE, MoE. Member- Convener

3. Terms of Reference for the Committee are as under:

a. To strengthen the accreditation processes by NAAC; and the ranking system by NIRF.

b. Recommend how more institutions come into the fold of accreditation.

c. To prepare a roadmap for aligning NAAC, NBA and NIRF to the proposed National Accreditation Council (NAC) in HECI.

4. UGC shall provide the necessary secretarial and logistic assistance to the Committee.

5. The Committee shall complete the work and submit their report within a period of two months.
To:

(1) Dr. K. Radhakrishnan, Chairperson BoG, IIT Kanpur & Chairperson, Standing Committee of IIT Council.

(2) Prof. Mridul Hazarika, Vice-Chairman, Vice-Chancellor, Mahapurusha Srimanta Sankaradeva Viswavidyalaya, Assam.

(3) Prof. Bharat Bhaskar, Professor, IIM, Lucknow, Lucknow.

(4) Joint Secretary, HE, MoE.

Copy to:

1. PS to Hon'ble EM
2. PS to Hon'ble MoS (SS), MoE
3. PSO to Secretary, D/o HE, MoE.
4. Secretary, UGC

(Smita Srivastava)
Director (UGC)
No. 12-11/2022-U1  
Government of India  
Ministry of Education  
Department of Higher Education

ANNEXURE-2  

Shastri Bhawan, New Delhi.  
Dated, the 3rd January, 2023.

ORDER  

The Government of India, vide Order dated 03.11.2022 (copy enclosed), has constituted a Committee for strengthening the Assessment and Accreditation (A&A) of Higher Educational Institutions (HEIs) under the Chairperson-ship Dr. K. Radhakrishnan, Chairperson BoG, IIT, Kanpur & Chairperson, Standing Committee of IIT Council.

2. During the second meeting of the Committee held on 21.12.2022 under the Chairperson-ship Dr. K. Radhakrishnan, the Committee recommended that for promoting the Centralized data Collection with the objective of ‘One Nation – One Data’, there is a need to define an appropriate standardized database structure for collection of data from the HEIs through a common Portal. This data should be the source for according Accreditation/ Ranking of HEIs. This will ensure data simplification and eliminate the problems faced by HEIs regarding filling up data on multiple portals. The Committee thus decided to constitute the following Committee:

1. Prof. Rajat Moona, Director, IIT, Gandhinagar  
2. Prof. Santanu Chaudhury, Director, IIT, Jodhpur  
3. Prof. Shalabh, Dean Academic, IIT, Kanpur  
4. Prof. Achla M. Raina, former Dean, Academic, IIT, Kanpur  
5. Prof. Yogesh Singh, Vice-Chancellor, University of Delhi  
6. Prof. B. J. Rao, Vice Chancellor, Central University of Hyderabad

3. The Term of Reference for this Committee shall be to examine the existing data structures being adopted by different agencies and develop a unified data segment applicable for different categories of HEIs.

4. The sub-committee shall complete the work and submit their report to Chairman of the Committee constituted vide order dated 03.11.2022.

Encl: As above.

(Smita Srivastava)  
Director (UGC)

To:

The Members of the Committee.
Copy to:

i. Dr. K. Radhakrishnan, Chairperson BoG, IIT, Kanpur & Chairperson, Standing Committee of IIT Council

ii. Prof. Mridul Hazarika, Vice Chancellor of Mahapurusha Srimanta Sankaradeva Viswavidyalya, Assam

iii. Prof. Bharat Bhaskar, Professor IIM, Lucknow

iv. Joint Secretary, D/o HE, MoE.