APPENDICES

APPENDIX 1: TERMS OF REFERENCE FOR DREAM DIGITALIZATION PROCESS

(Abridged)

NABH has a large volume of applications and needs to move on to an efficient online method of tracking applicants, managing the accreditation process and providing a more efficient method for assessors and finally provide accountability data to NABH secretariat and committee members.

Objective is to design and develop a web based application to capture all essential data to comply with the National Accreditation Board for Hospitals & Healthcare Providers (NABH) standards. NABH currently provides accreditation to the following:

- Hospitals
- Small Health Care Organisations (SHCOs)
- Blood Banks
- Wellness Centres
- AYUSH (5 sub programs-Ayurveda,Yoga And Unani, Siddha Naturopathy, Homoeopathy
- Medical Imaging Services
- Dental Centres
- Primary Health Center/Community Health Center

User roles with different privileges

Stakeholders are divided into 4 groups and exclusive login ids and passwords will be assigned to the members of each group. The access to information will be group specific. Various groups are:

1. HCOs
2. Assessors
3. Committee members
4. NABH secretariat

Requirements

1. Software Requirements Specification (SRS)
2. Desired features for system architecture
3. Data entry for old records
4. Training to NABH staff
5. Help Desk
6. Software maintenance
7. Data backup

1. Software Requirements Specification

1.1 To digitalize the documentation of NABH (to start with hospital accreditation programme) for effective documentation and management with the aim of maintaining minimal manual records.
1.2 To have the basic software keeping in mind future requirements (scalable).
1.3 To address requirements from assessors, committees and secretariat point of view.
1.4 To effectively disseminate information among all concerned in NABH secretariat and assessors.
1.5 To address and track clinical indicators.
1.6 To maintain and track assessors database, performance and feedback.
1.7 For knowledge sharing among assessors, committees and HCOs (applicant and accredited).

2. Desired Features For System Architecture

2.1 System architecture

The proposed system may be a web based system built to serve the users spread over the internet and intranet. The server-side will host the web enabled database for serving data. Typically, the users may request information from an Internet server holding the data repository and upload documents. Then the server will process the request and send the information back to the users. The server components, i.e the web server or application server and the data server should form a part of the server architecture.

Only authorized NABH staff should have access to the server application or database. This architecture may have to be developed specifically for internet applications for publishing secure data. It may be designed to handle intranet sites and should scale to meet server capacity needs as web site demand increases.

We may need following servers, but this should not be considered as complete list

i. Web server/application server
ii. Data base server
iii. Backup servers
iv. Firewall and load balancer

2.2 Desired features for documents and content management system

i. Robust highly available web portal
ii. Document/content management system
iii. General information on common site for all, and specific information resource pages for members, HCOs and assessors.
iv. Provision for suggestion and discussion on general page
v. Online registration and access for committee members and secretariat, HCOS and assessors
vi. Online forms (convert from physical forms)

vii. Online application, self assessment toolkit, documents submission
viii. Online payment system
ix. Searchable database of users, hospitals, assessors etc.
x. Mail merge system to automatically send emails to notify on actions pending.
xi. Data of clinical indicators of HCOs.
xii. Documentation (training manuals, online help, videos, FAQs etc.)
xiii. Audit trail for each HCO as per their unique ID number by NABH secretariat.
xiv. Online tracker for applications(application form status)
xv. Automated updation of lists of new registrations, payments received etc
xvi. Provision to compare ratings of present and past assessments/self and pre assessments.

xvii. Mail and online Alerts (when logging in, there can be a page with alert and alert history for the user).
xviii. Online entry by assessors for assessment (pre, final, surveillance) checklist
Second and Third year Fee Reminders: Mail alert to HCO for submission of the required annual accreditation fee.
xix. Maintain and track assessor database, performance and feedback.
xx. Resource Pages for assessors, HCOs

xxi. Dashboard
xxii. Document and work flow Management
a) Multiple users should be able to view the documents.
b) During the assessment process the documents can be viewed by multiple people based on role. Similarly, editing privilege will be based on role.
xxix. Complaints record/documentation-kind of complaint, resolution, time within which complaint resolved
xxx. Follow up
Surveillance visit: NABH gets an alert 1 month before the surveillance visit. Hospitals upload the updated documents, if any. NABH gets an alert for the same.
Re-assessment: System would provide various alerts to NABH and HCO for re-assessment six months before the expiry of accreditation

3. Training to NABH staff

3.1 Regarding software usage
3.2 Small technical errors to manage

4. Help Desk

A telephone number/e mail for Helpdesk to be made available to NABH at all times. Problems associated with the Software and related documentation. All issues are prioritized and assigned according to the severity of the issue.

Issue classification

NABH's request for services will fall under one of the following categories. All issues reported to Customer Support are classified and directed to the appropriate team for response and resolution. This classification is used to set expectations regarding the response time.

Impact	Description	Definition	Response Time
Fatal (Severity 1)	Application Unavailable	Operations halted, users are not able to complete their critical operations and no workaround is available	Within 4 hours
Critical (Severity 2)	Severe loss of functionality	Key operational functions cannot be performed on the live system as a result.	Within 8 hours
Important (Severity 3)	Individual functionality not working	Individual functionality not working resulting in minor degraded operations.	Within 24 hours
Minor (Severity 4)	Design or documentation problem	Issue is documentation related or has minimal impact on operations. or has a work around, i.e. another way of completing the required task.	Based on mutual agreement

Dash Board

The dash board will have the following

1. Committees

   Name and contact details of the members, committee objectives, minutes of last meeting and meeting schedule of the following bodies:

   i. NABH general body
   ii. Accreditation committee
   iii. Technical committee
   iv. Appeals committee

   (Annexure 1)

2. Events calendar

   Dates of the upcoming assessments, conclaves, events etc. Colour coding for all these events may be used.

3.Training programmes

   Detail information about the programme specification of the trainings and workshops.

4. Knowledge Centre

A knowledge centre can be created as part of the web portal for research and building awareness to the international community. Additional information may be maintained that is of benefit to NABH members and some to the general public or to potential NABH members.

5. Quality/Clinical indicators of accredited HCOs

The system will support NABH approved clinical indicator data for all the accredited hospitals.

HCOs will upload their clinical data on a prescheduled frequency and simultaneously auto calculation will be done by software (formulae for the indicators should be in the software).

Quality Indicators to be monitored by HCOs:

1. Percentage of medication errors
2. Percentage of transfusion reactions
3. Urinary tract infection rate
4. Respiratory infection rate
5. Intra-vascular device infection rate
6. Surgical site infection rate
7. Incidence of falls
8. Incidence of bed sores after admission
9. Bed occupancy rate and average length of stay
10. Incidence of needle stick injuries

6. Requirements from ISQua and other accreditation bodies to be incorporated

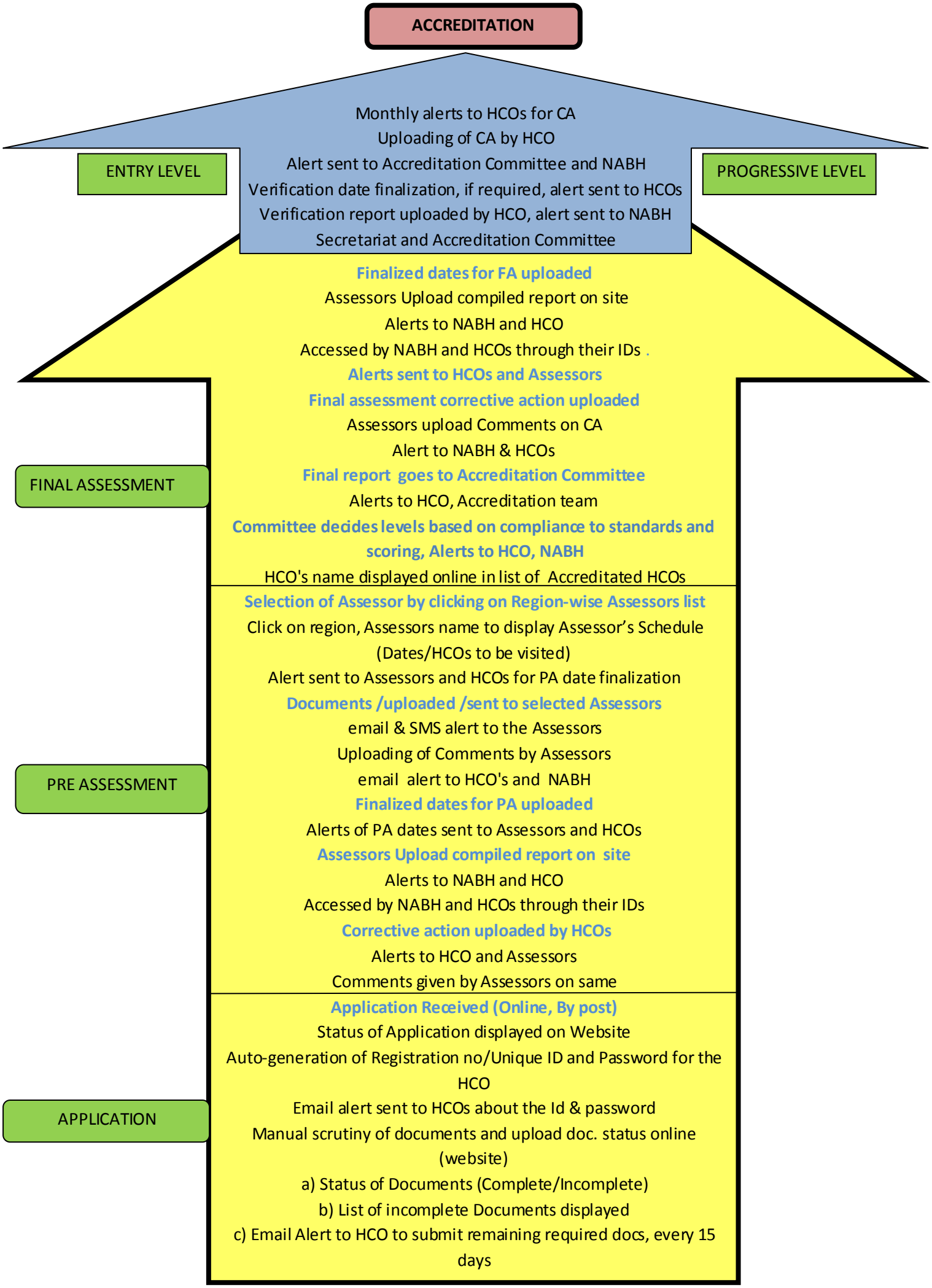
7. Resource pages for the assessors, HCOs

7.1 Assessor resource page

i. List of active assessors area wise and contact details, qualification, number of assessment to be done, performance level
ii. Forms and documents
iii. Uploading news
iv. Sharing good practices
v. Various guidelines
vi. Provision for the assessors to send queries to the secretariat
vii. Online Discussion panels for knowledge sharing

7.2 HCO resource page

i. Provision for the HCO to send queries to the secretariat
ii. Profiles of HCOs containing their details related to accreditation process


ACCREDITATION
Monthly alerts to HCOs for CA
Uploading of CA by HCO
Alert sent to Accreditation Committee and NABH
Verification date finalization, if required, alert sent to HCOs
Verification report uploaded by HCO, alert sent to NABH
Secretariat and Accreditation Committee
ENTRY LEVEL
PROGRESSIVE LEVEL
Finalized dates for FA uploaded
Assessors Upload compiled report on site
Alerts to NABH and HCO
Accessed by NABH and HCOs through their IDs .
Alerts sent to HCOs and Assessors
Final assessment corrective action uploaded
Assessors upload Comments on CA
Alert to NABH & HCOs
FINAL ASSESSMENT
Final report goes to Accreditation Committee
Alerts to HCO, Accreditation team
Committee decides levels based on compliance to standards and scoring, Alerts to HCO, NABH
HCO's name displayed online in list of Accreditated HCOs
Selection of Assessor by clicking on Region-wise Assessors list
Click on region, Assessors name to display Assessor's Schedule (Dates/HCOs to be visited)
Alert sent to Assessors and HCOs for PA date finalization
Documents /uploaded /sent to selected Assessors
email & SMS alert to the Assessors
Uploading of Comments by Assessors
email alert to HCO's and NABH
PRE ASSESSMENT
Finalized dates for PA uploaded
Alerts of PA dates sent to Assessors and HCOs
Assessors Upload compiled report on site
Alerts to NABH and HCO
Accessed by NABH and HCOs through their IDs
Corrective action uploaded by HCOs
Alerts to HCO and Assessors
Comments given by Assessors on same
Application Received (Online, By post)
Status of Application displayed on Website
Auto-generation of Registration no/Unique ID and Password for the HCO
Email alert sent to HCOs about the Id & password
APPLICATION
Manual scrutiny of documents and upload doc. status online (website)
a) Status of Documents (Complete/Incomplete)
b) List of incomplete Documents displayed
c) Email Alert to HCO to submit remaining required docs, every 15 days

APPENDIX 2: QUALITY DASHBOARD

Introduction

The purpose of the quality indicators on dashboard is to provide a mechanism for monitoring clinical and non clinical indicators across health care organizations and the success of the organization in quality improvement strategies.

The quality indicators on dashboard will be a part of the main dashboard incorporated in the NABH software.

The system will support NABH approved clinical indicator data for all the accredited hospitals. Presently there are 10 indicators. They are:

1. Percentage of medication errors.
2. Percentage of transfusion reactions
3. Urinary tract infection rate
4. Respiratory infection rate
5. Intra-vascular device infection rate
6. Surgical site infection rate
7. Incidence of falls
8. Incidence of bed sores after admission
9. Bed occupancy rate and average length of stay
10. Incidence of needle stick injuries

Features

1. Lists of clinical and non clinical indicators with relevant updated data from HCOs (A tabular format with traffic lights color coding may be used).

Month: March 2011 **Indicator**												
HCO		1	2	3	4	5	6	7	8	9a	9b	10
	A											

	B											
	C											

2. Indicator description, which will include:
    a. Description of the indicator (definition, numerator, denominator)
    b. Indicator status(available/ unavailable, updated)
    c. Data source(name of HCO, data entered by person)
    d. Indicator type(process/outcome)
    e. Frequency of reporting(weekly/monthly/quarterly/annually)

3. The dashboard will have provision for comparison between past data on the indicators and the present or updated data (trend information).

4. Benchmarking :
    a. The benchmark will be decided
    b. Criteria for deciding the benchmark will be displayed

Methodology

HCOs will upload their clinical data on a prescheduled frequency and simultaneously auto calculation will be done by software (formulae for the indicators should be in the software).

The dashboards will be displayed online, enabling presentation of a variety of complex data in a simple and easy to understand format, with the added capability of drilling down to find more detailed information.

It will be updated regularly so that the most current information is available to users.

Dashboard will expand over time as new measures are identified and indicators are revised or discarded.

Responsibilities of NABH

1. Decides type of indicators
2. Frequency of reporting

3. Sends alerts to HCOs to update their respective data
4. Monitor the compliance of sending data
5. Ensure privacy and access to information and provides access to HCOs to upload their data
6. Analyze target achievements, benchmarking
7. Maintain the indicators database

APPENDIX 3: DEFINITIONS

- **Occupational health and safety**: A cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work or employment. The goal of all occupational health and safety programs is to foster a safe work environment.
- **Occupational Safety and Health Management:** comprises the activities designed to facilitate the coordination and collaboration of workers and employers in the promotion of occupational health and safety in the work place.
- **Hazard:** Any source of potential harm, including injury, illness, disease, death, and environmental or property and equipment damage.
- **Risk** : The chance of something happening that will have an impact on the organization's objectives. Risk is measured in terms of:
- **Likelihood:** The probability of something happening and the frequency with which it happens, and
- **Consequence** : The outcome and impact of an event if it occurs.
- **Hazard Identification:** The process of examining each work area and work task to identify all inherent hazards. This means identifying all possible ways in which people may be harmed through work-related activities.
- **Risk Assessment**: The overall process of risk identification, risk analysis and risk evaluation.
- **Risk Identification:** the process of determining what, where, when, why and how something could happen.
- **Risk Analysis:** the systematic process of understanding the nature of and deducing the level of risk.
- **Risk Evaluation:** the process of comparing the level of risk against risk criteria.
- **Risk Control:** the process of selecting and implementing measures to eliminate or reduce risk.
- **Monitoring and Reviewing:** The process of regularly checking the implemented measures to ensure they are working effectively to eliminate or reduce the level of risk.

APPENDIX 4: DSE RISK ASSESSMENT QUESTIONNAIRE

DISPLAY SCREEN EQUIPMENT (DSE):RISK ASSESSMENT QUESTIONNAIRE

STAGE 1 – ASSESSMENT DETAILS

Name of DSE user		**Desktop or laptop?**	
Date of assessment			

STAGE 2 – DSE ACTIVITIES

Provide a summary of your DSE activities – e.g. type of use; number of hours used each day, length of continuous use, etc.

STAGE 3 – ASESSMENT AND ACTION PLAN

S. No.	Question	To be filled by DSE User (Yes/No) or Comments (if required)
1	Do you feel any pain, discomfort or stiffness in your neck, shoulders, arms or hand(s) during or after using IT equipment?	
2	Have you felt any of the above when working with IT equipment in the past?	
3	Do you / have you had any health problems that could affect your work with IT equipment? (For example: epilepsy, back problems, poor circulation)	
4	Are the words on your screen clear, easy and comfortable to	

	read?	
5	**Is the image on the screen stable and flicker- free?**	
6	**Can you adjust the brightness and / or contrast?**	
7	**Does your screen:**	
	a) swivel?	
	b) tilt?	
8	**Are there any reflections on the screen?(from windows or lights)**	
9	**Is the keyboard separate to the screen?**	
10	**Can you tilt the keyboard?**	
11	**Can you easily read the letters, numbers and symbols on the keyboard?**	
12	**Do you have a comfortable keying position?**	
13	**Is the mouse suitable for your needs?**	
14	**When using a mouse do you:**	
	a) Keep it close to the keyboard?	
	b) Have a straight wrist and relaxed hand?	
	c) Take your hand off the mouse when you are not using it?	
	d) Support your wrist and forearm while using the mouse?	
15	**Does the mouse work smoothly at a speed that suits you?**	
16	**Is the software you use suitable and can you use it comfortably?**	

17	**Is your work surface large enough?**	
18	**Can you comfortably reach and use the equipment / papers etc. on your desk?**	
19	**Are your work surfaces free from reflections? (For example from windows or lights)**	
20	**a) Can you adjust your seat's:**	
	Back Tilt? **Bach Height?** **Seat Height?**	
	b) Does your seat have wheels/glides?	
21	**Is your chair adjusted as follows:**	
	a) The small of your back supported	
	b) Forearms horizontal	
	c) Eyes level with the top of the screen	
	d) Feet flat on the floor without too much pressure from the seat on the backs of the legs?	
22	**Do you have enough room under your desk to move your legs and change position?**	
23	**How long do you work at a computer before taking a break?**	
24	**How often do you have an eyesight test?**	
25	**When was your last eyesight test?**	
26	**Do you wear glasses only when you are working with IT equipment?**	
27	**Do you feel that the lighting levels are suitable?**	

28	**Do you have comfortable levels of ventilation?**	
29	**Is the workplace at a comfortable temperature?**	
30	**Are there comfortable noise levels in the workplace?**	
31	**Do you have any other concerns or comments regarding your workstation or DSE use?**	
32	**Have you received any training on the following:**	
	a) The risks from DSE work?	
	b) The importance of good posture and changing position and how to adjust furniture to avoid risks?	
	c) Organising the workplace to avoid awkward or frequently awkward movements?	
	d) Avoiding reflections and glare on or around the screen?	
	e) Adjusting and cleaning the screen and mouse?	
	f) Organising work for activity changes or breaks if necessary?	
	g) Who to contact for help and to report problems or symptoms?	
33	**Who to contact for DSE and office furniture faults?**	

SUGGESTIONS

APPENDIX 5: HAZARD IDENTIFICATION CHECKLIST				
Facility name and location:			**Date:**	
Evaluation conducted by:			**Work Area inspected:**	
	Area	**Yes/No**	**Comments**	**Action**
1	**Fire prevention and Emergency preparedness**			
1.1	Fire alarms and sprinklers are available and in working order			
1.2	Suitable fire extinguishers available and in good condition			
1.3	Fire extinguishers are regularly serviced (6 monthly/yearly)			
1.4	Sufficient fire exits to ensure prompt escape in case of emergency			
1.5	Fire exits are clearly marked and readily accessible			
1.6	Emergency lighting is present and in good operating condition			
1.7	Fire and evacuation drills carried out			
1.8	Employees are trained in the correct use of fire extinguisher			
2	**Electrical Hazards**			
2.1	Presence of broken plugs, sockets, switches or unscrewed/ damaged/ frayed/exposed wires, leads,cables			
2.2	All switch boxes and distribution boxes are closed with covers and in good condition			

2.3	All cable trenches are covered properly and cables in cable trays secured properly			
2.4	No temporary leads or cords on the floor			
2.5	All connections and electrical devices are earthed. Circuit breakers are available in equipment			
2.6	Electrical receptacles/circuits are not overloaded			
2.7	Extension cords and power strips are plugged directly into wall outlet and not into other extension cords or power strips			
2.8	Area in front of electrical circuit panels is clear(atleast 36 inches open area)			
2.9	All electrical equipment is turned off at the end of the day			
3	**General Lighting**			
3.1	Light fittings are clean and in good working condition			
3.2	Work area is well lit			
3.3	There is no direct /reflected glare or shadow			
4	**Walkways/ Floors/Stairways/Corridors/Walls/Ceilings/Elevator**			
4.1	Floor surface is even and uncluttered			
4.2	Floor areas are dry and clean			

4.3	Walkways are clearly and adequately marked,signages are present in common areas			
4.4	Floors are free from slip hazards			
4.5	Walkways are free from obstruction, no tripping hazards are present			
4.6	There are unguarded/ inadequately covered floor openings			
4.7	Stairs are not blocked and in good condition			
4.8	Railings are provided at open-sided floors/ platforms and at stairs with more than three raisers			
4.9	Stairs have uniform height and tread width			
4.10	Entrance mats are available for wet weather			
4.11	No holes through walls or ceilings and all ceiling tiles/false ceiling in place			
4.12	Timely maintenance and servicing of elevator			
5	**Facilities and Housekeeping**			
5.1	Safe drinking water is available at all times			
5.2	Adequate number of toilets and urinals available			
5.3	Toilets are clean and provided with soap for hand washing			
5.4	Dustbins are located at suitable			

	points			
5.5	Bins are not overflowing			
5.6	Bins are emptied regularly			
5.7	Hot water heaters are inspected annually			
6	**Storage**			
6.1	Materials are stored in racks in a safe manner			
6.2	Floor around racking is clear of clutter			
6.3	Racking is in good condition,no damaged uprights,beams etc.			
6.4	Flammable and combustible liquids are stored properly			
7	**First Aid**			
7.1	First aid kit is readily available, well stocked and orderly			
7.2	Emergency phone numbers are displayed at first aid kits and at telephones			
7.3	Trained personnel to render first aid available at all times			
7.4	All employees are aware of location of first aid kit			
8	**Office**			
8.1	Air conditioning working adequately			

8.2	Noise during work hours is disruptive, excessiveor distracting			
8.3	Filing cabinets/wall shelves are stable and in good order			
8.4	Office machinery regularly serviced			
8.5	Power equipment maintenance carried out			
8.6	Shelves are not overloaded			
8.7	Bookcases and file cabinets are secured from tipping			
8.8	File drawers are closed when not in use			
8.9	Only one file drawer is opened at a time to prevent tipping			
8.10	Step stools are available for use, where needed			
8.11	All damaged equipment and furniture is immediately removed			
9	**Ergonomic Observations**			
9.1	Job involves high rates of repetitive motion			
9.2	Workers have to maintain the same posture over extended periods of time			
9.3	Monitors are directly in front of users, the top of screens are at or slightly below eye level and at least 18 to 24 inches away			

9.4	Monitor are positioned to avoid glare by adjusting window shades or lighting and/or using glare screens			
9.5	Chair/keyboard heights are adjusted to keep hands, wrists and forearms parallel to the floor with arms positioned naturally			
9.6	Chair and footrests heights are adjusted to keep thighs parallel with the floor			
10	**Display Material**			
10.1	Occcupational Health and Safety (OHS) policy signed and up to date			
10.2	OHS policy is displayed			
10.3	No smoking signs are displayed			
10.4	Emergency plan/Evacuation plan (for disasters like earthquake,bomb threat etc.) is in place and displayed			
10.5	Emergency Telephone numbers (Police,Ambulance,Fire brigade,nearest hospitals) available on hand			
11	**Occupational Health and Safety (OHS) Information**			
11.1	OHS Manual is available			
11.2	Incident report form available			
11.3	Hazard report forms available			
11.4	Dates of last fire evacuation drills conducted are recorded			
11.5	Training records are up to date			

12	**Employee Training - employees are trained**			
12.1	in emergency procedures			
12.2	not to overload shelves			
12.3	to not attempt equipment repairs unless authorized			
12.4	to prevent fire hazards			
12.5	to keep trip hazards off floor			
12.6	in proper inspection & use of step ladders			

APPENDIX 6: DESCRIPTION: LIKELIHOOD, CONSEQUENCE

Likelihood	Value	Severity
Highly Unlikely/Rare	1	Insignificant
Unlikely	2	Minor
Possible	3	Moderate
Likely	4	Major
Very Likely/Almost Certain	5	Catastrophic/Fatal

Measures of Likelihood:

Highly Unlikely/Rare: May only occur in exceptional circumstances

Unlikely: Could occur at some time

Possible: Might occur at some time

Likely: Will probably occur in most circumstances

Very Likely/Almost certain: Expected to occur in most circumstances

Measures of Consequences:

Insignificant: Low impact, no injuries

Minor: Minor injuries, First aid required

Moderate: First aid and ongoing medical treatment, probable lost time

Major: Extensive injuries/possible multiple injuries or single fatality

Catastrophic/ Fatal: Fatalities

APPENDIX 7: DESCRIPTION OF RISK CATEGORIES

LOW (1-4)	Risks that have the potential to cause minor injury. No further action is required in the short or medium term, but the activities must be kept under review. Recommended action period: Up to 12 months
MODERATE (5-9)	Risks that have the potential to temporarily disable or seriously injure. Work is able to proceed but the leaders/managers/supervisors must continually monitor work to ensure that changed conditions do not raise risk exposure. Efforts must be made to reduce the risk within a specified and reasonable time scale, but the costs of prevention may be considered. Recommended action period: 1-2 months
HIGH (10-16)	Risks that have the potential to cause multiple injuries or a single fatality. Senior management must be notified. Work is able to proceed but the leader/manager/supervisor must reassess the risks and implement controls that reduce the level of risk exposure. Urgent efforts are required to reduce the risk. If appropriate, consider whether the activity should be re started or continued in meantime. Recommended action period: Within 4 weeks
EXTREME (17-25)	Risks that have the potential to cause multiple fatalities. Warning. Work is to cease immediately. Senior management must be notified. Leaders/managers/supervisors must reassess the risks and implement controls that reduce the level of risk exposure before work can recommence. Recommended action period: Immediate

APPENDIX 8: HOW HIERARCHY OF CONTROL WORKS

If the risk cannot be …	**Then …**
Eliminated	substitute the hazard with something with a lesser risk that still performs the same task in a satisfactory manner.
Substituted	isolate the hazard from staff and visitors or separate them from the hazard.
Isolated	consider engineering controls.
Engineered out	apply administrative controls such as policies, procedures and safe work practices. **Warning.** Administrative controls should not be the first option to control the risk but can be used if controls higher on the hierarchy of control pyramid cannot be applied or, having been applied, do not adequately control the risk.
Minimised through administrative controls	provide appropriate PPE to staff and visitors. **Note.** PPE should only be used when higher order controls are not practicable or adequately effective.

APPENDIX 9: RISK MANAGEMENT WORKSHEET

	IDENTIFY		ASSESS				CONTROL						IMPLEMENT		REVIEW		
S. No.	Hazards Identified	Hazard Category	Risk identification	Risk Calculation			What is already being done	Risk Control		Residual risk			Person responsible for implementation	Agreed timeframe	Review date	Reviewed (Y/N)	Reviewed by
				L	C	R		a) Control	b) Action	L	C	R					
		a) Physical															
1	Broken plugs, sockets, switches or unscrewed/damaged /frayed/ exposed wires, leads,cables	Electrical	a) Electric shock b)Short circuit,Fire	UL 2	Insig. to Major 1-4	2-8	Repair/Replace	Eliminate	Immediate replacement or repair				Mr. FC Srivastava (Admin)	As and when required	5-Oct-11		
2	Temporary leads or cords on the floor	Electrical	Trips and falls	UL 2	Minor to Mod. 2-3	4-6		Eliminate	Fix all permanent stray wires, cords to the wall.Remove all temporary cords from the floor when not in use				Mr. FC Srivastava (Admin)	10 days	15/5/2011		
3	Area in front of electrical circuit panels is not clear(atleast 36 inches open area)	Electrical	Fire	HUL/ Rare 1	Mod./ Major 3-4	3-4		Eliminate	Keep area in front of all circuits clear, do not stack any items too close to plugs/ circuits				Mr. FC Srivastava (Admin)	10 days	30/4/2011		
4	Electrical equipment is not turned off at the end of the day	Electrical	Fire	HUL/ Rare 1	Mod./ Major 3-4	3-4		Administrative	Turn off all electrical equipment at the end of the day, plug out if possible				Mr. Sanjeev Mr. Lawrence	Daily			
5	Noise during work hours is disruptive, excessive or distracting	Office environment	Poor concentration, noise induced hearing loss	UL 2	Insig. to Mod. 1-3	2-6		Administrative	Any personal conversations to be held outside the work place area to prevent others getting disturbed				All employees	Daily			
6	Cigarette smoke	**b) Chemical**	Eyes, nose and throat irritation, decreased lung function and lung cancer	UL 2	Insig. to Major 1-4	2-8		Administrative Eliminate	Non smoking and smoking areas to be defined in policy				Dr. BK Rana	Daily	Jun-11		
		c) Biological															
7	Air conditioners not cleaned/ No fresh air	Bacteria	Respiratory tract infections, Legionnaire's disease	UL 2	Insig. to Mod. 1-3	2-6		Engineering, Administrative	Timely cleaning of AC vents, Annual Preventive maintenance				Mr. FC Srivastava (Admin)	Quarterly	25/6/2011		

8	Dust/Mold on surfaces and papers stored in seating areas	Bacteria/ Virus/ Fungus	Cough,throat irritation Respiratory infections	UL 2	Insig. to Minor 1-2	2-4	Dusting (but not all areas)	Eliminate, Administrative	Avoiding stacking of papers at seating areas, Weekly dry wiping, mopping the surfaces				Mr. Sanjeev Mr. Lawrence	Weekly	25/6/2011		
		d) Ergonomic															
9	Workers have to maintain the same posture over extended periods of time;Repetitive work	Ergonomic	Musculo skeletal disorders,poor circulation,Gradual Strain Injury (GSI) or Repetitive Strain injury (RSI)	Possible 3	Insig. To Mod. 1-3	3-9		Administrative	Take small breaks after every 30 minutes, Stretcing				All employees	Daily			
10	Continuously seeing the computer monitor/screen	Ergonomic	Eye strain, Headache, Computer vision syndrome,Work related visual complaints (asthenopia),Red-eye syndrome/Dry-eye syndrome,Accomodation disturbances	Possible 3	Insig. To Mod. 1-3	3-9		Administrative	Look away from the computer screen in between, eye relaxation exercises				All employees	Daily			
11	Glare on computer screen	Ergonomic	Eye strain, Headache	Likely 4	Insig. To Minor 1-2	4-8		Eliminate/ Substitute Engineering	Adjust the monitor position, Anti glare monitor or spectacles				All employees Mr. Jena	As and when required			
12	Wrong seating position (posture, armhands positions etc.)	Ergonomic	Musculo skeletal disorders,poor circulation,GSI,RSI	Likely 4	Insig. To Mod. 1-3	4-12		Administrative	Train on Ergonomics				All employees Mr. Jena	Yearly	25/6/2011		
13	Chair and footrests heights are not properly adjusted	Ergonomic	Poor circulation,Aches and pains	Likely 4	Insig. To Minor 1-2	4-8		Administrative Substitute Engineering	Ajust the height of chair, footrests provided may need to be customized as per user				Mr. FC Srivastava (Admin.)	As per requirement	25/5/2011		
14	Monitors not directly in front of users, level of screens not properly maintained as per eye level	Ergonomic	Musculoskeletal disorders,eye strain	Likely 4	Insig. To Mod. 1-3	4-12		Administrative	Adjust the monitor position, Check for eye and screen level				All employees Mr. Jena	Time to time			
15	Work burden	**e) Psychosocial**	Stress, Burnout	UL 2	Insig. To Mod. 1-3	2-6		Administrative	Avoid giving too many tasks to one person, recruit new people where utmost required				Directors, Management				
		f) Safety															
16	Walkways/floors working spaces are uncluttered, tripping hazards are present	Walkways/ Floor/Stairways/ Corridors/ Walls/Ceilings	Trips and falls	Likely 4	Minor to Mod. 2-3	8-12	Lack of space	Eliminate	Avoid stacking items in the walkways, check stray wiring hanging or strewn on the				All employees, Mr. Vikas	Weekly	25/6/2011		

									floor									
17	Floor around racking is cluttered	Storage	Trips and falls	Likely 4	Minor to Mod. 2-3	8-12	Lack of space	Eliminate	Clear all space surrounding the racks. Store heaviest items lowest,and lighter items upwards				Mr. SanjeevMr. Lawrence	Weekly	25/6/2011		
18	Materials are not stored in racks in a safe manner	Storage	Materials falling on employee,topplin g over	UL 2	Minor to Mod. 2-3	4-6	Lack of space	Eliminate	Store heaviest items lowest, and lighter items upwards				Mr. Sanjeev Mr. Lawrence	Weekly	25/6/2011		
19	First aid kit is not available	First Aid	No primary treatment available for emergencies that can easily be self managed	Almo-st certain 5	Insig./ Minor 1-2	5-10		Administrative	Provide a First aid kit, place it in the reception, inform employees, train an employee in first aid				Dr. Zainab	Quarterly	30/4/2011		
20	Fire alarms and sprinklers are not present	Fire	No system to sound alarm and for immediate damage control	Almo-st certain 5	Insig. To Mod. 1-3	5-15		Engineering	Install fire alarm system and in the office area				Director					
21	Insufficient fire exits (no separate exit staircase from the floor)	Fire	Difficulty in prompt escape in case of emergency/fire evacuation	Almo-st certain 5	Minor to Major 2-3	10-15												
22	No fire drills carried out	Fire	Staff unaware on fire safety issues, may not be able to take prompt action, chaos,panic,confu sion	Almo-st certain 5	Minor to Major 2-3	10-15		Administrative Eliminate	Conduct fire drills with the Delhi fire services for the workplace				Director	Yearly	30/4/2011		
23	Employees are not trained in the correct use of fire extinguisher	Fire	May not be able to operate extinguishers/ delays in operating (loss of precious time)	Almo-st certain 5	Minor to Mod. 2-3	10-15		Administrative Eliminate	Train employees on the use of fire extinguishers				Director		30/4/2011		
24	No Emergency action plan/Evacuation plan in practice (Disasters:Eartquake ,Bomb threat etc.)	Practices	Staff totally unaware on emergency evacuation,panic, chaos may arise	Almo-st certain 5	Minor to Major 2-3	10-15		Administrative Eliminate	Prepare and display an Emergency Action plan, Inform and train all employees on use of the plan				Dr. Bhawna Gulati	Review Yearly	25/5/2011		
25	Absence of Signages (Directing on locations,Emergency Exit,Elevator usage safety,Fire safety etc.)	Practices	Visitors,new people face difficulty in way finding/locating.C onfusion in emergencies,chaos	Almo-stcertain5	Insig. toMod.1-3	5-15		AdministrativeEliminate	Place appropriate signages (Fire exit, No smoking, use of lift etc.) wherever required				Dr. BK Rana		30/4/2011		

26	Emergency phone numbers (police,fire,ambulance,hospital) are not displayed	Practices	Precious time wasted in searching during an emergency	Almo-st certain 5	Insig. 1	5		Administrative Eliminate	Display list of emergency numbers at all phones				Mr. Anil		30/4/2011		
27	No employee training on Health and safety issues(Fire safety and evacuation,Ergonomics etc.)	Training	Staff unaware on health and safety issues(Correct Ergonomic practices, Safety in emergency situations etc.)	Almo-st certain 5	Insig. To Mod. 1-3	5-15		Administrative Eliminate	Conduct different training sessions based on safety requirements by certified agencies (Fire safety, Ergonomics, Disaster management), 1-2 employees on risk assessment				Dr. BK Rana	Yearly	30/4/2011		
28	Annual maintenance of Fire Extinguisher not done timely	Practices	Fire extinguisher may have insufficient material/empty when reqired	Almo-st certain 5	Insig. To Mod. 1-3	5-15		Administrative	Remind the company (Deltron) for the annual check				Dr. BK Rana	Yearly	30/4/2011		

APPENDIX 10: FORMAT FOR ACCIDENT REPORT FORM

ACCIDENT/DANGEROUS OCCURRENCE REPORT			
Name of person completing this report:			
Date of accident/dangerous occurrence:		**Time:**	
Name of injured person:			
Age:	**Title**		
Address:			
Department:			
Name of Witness:			
Address:			
Reported to:			
Place where accident/dangerous occurrence happened:			
Details of injury (Left/Right Leg/Arm etc.)			
Fracture? Yes No (Circle/Delete Accordingly)		**Detained in hospital for 24 hours? Yes No (Circle/Delete Accordingly)**	
Time stopped work:		**More than three days absence? Yes No (Circle/Delete Accordingly)**	
What was the injured person doing:			
Root Cause of accident/dangerous occurrence:			
Signature: (of person completing report):		**Date:**	
Directors Review:		**Date**	
Further Investigation) required? (Circle/Delete Accordingly)			**Yes No**

Please use the reverse of this form for any sketches, dimensions, etc. which may be useful subsequently. Alternatively affix photograph of scene of accident.