

## DESIDOC Website - A Portal for DRDO services

[AK TYAGI](#), [Sumit Goswami](#) & [Hemu Agarwal](#)

### 1. Everything Old is New Again: DESIDOC website

Websites are hotter than hot, newer than tomorrow, the greatest thing since sliced bread. Believe it or not, no organization that aspires beyond the neighborhood grocery store level will be able to survive out in the new century without a website. Once it became clear how versatile a tool of Internet could be, people everywhere woke up and smelled the TCP/IP coffee. Then they realized how much more useful the website models over the intranets was than the proprietary client server software running over the networking systems; and the intranet stampede was on.

To benefit from website over an intranet requires hard work, education, time and last but not far from least, a commitment from the top down, that you're going to fundamentally change how your company works. The tinder was all in place in the form of DRDO's Rapid Online Network Access (DRONA), but the fire didn't really start until the Network Services Division of DESIDOC converted its B2B(Business to business) site to a B2C(Business to customer) or to do a proper justice to the users, B2E(Business to Entertainment) site with DESIDOC's vast Information services related to books, reports, articles in journals and conference proceeding holdings etc. alongwith regular updates of national and international news, stock exchange rates, weather forecasts, cartoons, software downloads, e-message boards, horoscopes etc and many similar modules are under construction. By the time you think of a facility, which should be available on DESIDOC website, we plan to develop and present it to you for use on your desktop. A big factor in the growth of DRONA will be GroupWare. It will allow people to work together over the network on one or more common projects. It's largely an untouched platform and the idea is under development and would be available at DESIDOC website in near future with full security and a highly user friendly interface. This will enable organizations to have integrated communication, key business procedures like office orders, cash purchase, leave approval, project development, order processing and technical support handled by workflow support programs.

### 2. The Completed puzzle: DESIDOC Portal

Does all this sound incredibly difficult? Here we are not only asking you to consider using all this high technology; but on top of all that, we are asking you to change the very nature of your organization dynamics. After a comment like that, you might be wondering if it's worth going to the extra trouble of digitizing an organization when individual users can simple be given a file of papers containing information. Unfortunately, there's a lot like getting a mouser when the rest of the Defence Organizations of the world are moving on to the space fighters. The IT world is undergoing a massive transformation. You can jump on the bandwagon or get runover by it.

Still not sure? The final answer depends on how you conduct your operations. If you can deal with slow file transfer, minimal interoffice communication and only a feeble attempt at co-operative work, you really don't need an Intranet packed with websites. If your organization can benefit from fast e-mails, true GroupWare, online file transmission and approval, and getting up-to-the-minute software and news updates then stop waiting! The DESIDOC website awaits you; and the 21<sup>st</sup> century awaits your organization.

### **3. Advantages of using a website:**

#### **Web Technology**

- Web Technology is scalable and can be applied across WANs as well as small- to medium-sized LANs.
- Web Technology is excellent way to publish all the frequently changing documents within an organization.
- Fewer numbers are crunched. Web Servers typically do not need the computational power of the processor and hard-disk space that GroupWare applications, such as lotus notes, require.
- Easy-to-use Web Browsers are available for virtually all operating systems and hardware combinations; all of them are cheap, and many of them are free.
- There is no single-vendor solution to the Website marketplace; no single company dominates the scene and as a result of this open nature of Internet standards, products from different sources interpolate very well.
- Advances in HTML authoring tools and the addition of new features to desktop application suites make it much easier to create HTML pages for webservers.

**Cost Savings:** The substantial cost savings to DESIDOC can be the result of the following:

- Decreasing the number of print copies of various Newsletters.
- Sending a softcopy of the document/newsletter to a far off laboratory through the network, where it can be reproduced, thus saving the transportation cost and time.
- Lowering the cost of handling and transporting paper forms by creating and handling electronic forms.
- Lowering of travel cost by providing online training.

**Time Savings:** DESIDOC not only can save money but also time. It is now capable to do the following

- Disseminate information instantly.
- Reduce support time and energy by human resource, administration, finance, help desk and so on.
- Minimize time spent on learning specialized software applications through easy-to-use web browsers.
- Reduce time required to set up database account inquires.

**Increased Functionality:** With DESIDOC website, we are able to increase the functionality of existing information structure and do the following:

- Gain global access to information at the speed of light.
- Seamlessly connect workgroups and offices.
- Keep data up-to-date
- Expand knowledge by activating additional levels of details as needed.

**Connected Workforce:** One of the most important benefit of DESIDOC website can be in connecting the various aspects of the organization, including the following:

- Top officials can communicate effectively and directly with all the employees
- Functionally related, but geographically disconnected workgroups can work together.

#### **4. How will people access DESIDOC Website?**

People will access the site directly once word starts to spread about how useful the information is and how much time they can save, but we will have to get the word out. We can do this by the traditional methods of memos and e-mails, but we can also use one site to advertise another if we include a *What's New* section on the original site of DRDO and in various pages of different laboratories. People will also access our site via links from their sites. This might be a site run by a different laboratory of DRDO or a site concerned with similar service. The creators of the other sites will add a link to our site because they think that we have something on it that their users will value, and it makes them look pretty good to be associated with us in this way.

#### **5. Welcome to the web**

It's not the information but the hands-on nature of that information which makes the web, which makes the web so special. You can find static facts in any book or file. Books takes months to update, but WebPages take minutes to update. Finding something in a book or file can take hours if you have access to the right volume or number. Finding something online can also take hours, but there's a decent chance it will take mere seconds; and every volume that's online is available for your search. With the combination of databases on the Web, manually updated pages will become the rarity rather than the norm. Today, we have a website made up mostly of static, unchanging information. Oh, it moves in hours and days instead of weeks and months; but still, most of its information stays untouched by an editor's hand for months. Not anymore. With the one-two punch of databases in the backend integrated with the scripting languages, we are quickly moving towards the day when the website will be alive as television broadcasting, if not more so.

You should also remember that when you put your trust in Web Information, you're putting your faith in editors and webweavers who just might change the official dicta on a

subject on a whim based on the political climate of the day. On the web, this kind of information can be written, edited and published in less time than it will take you to read this article. Are we telling you not to use the web? Of course not. We are just warning you not to blindly trust its information.

Over the next few months, you will see many web developments. By the turn of the year, you will look back at today's DESIDOC website and think it as antique as we now see Tipu's sword. The biggest change will be the automation of file transfer, ease of information gathering and inter-laboratory communication.

There's a line in an old Eagles' song, "Hotel California", that says: "You can check out anytime, but you can never leave." That's not a bad way of thinking about the Intranet. Once your organization has made a commitment to the Intranet, Sir, you are committed. In sickness and in health, for senior or for junior, once your organization is on the Intranet, you're there to stay, no matter what second thoughts you might have.

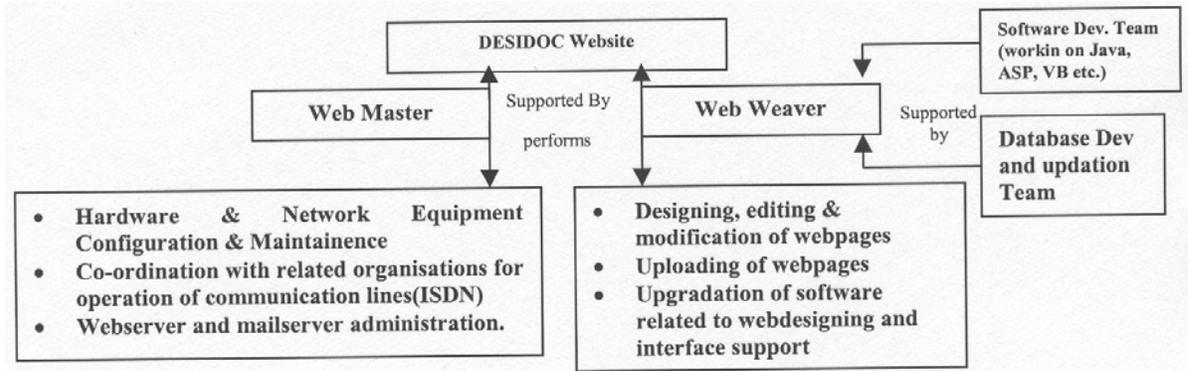
## **6. Working Together**

People will cause you more headaches than hardware and software combined. It's tragic but true. If everyone worked together in harmony with his or her eyes on the goal, you could have anything short of a functional website up within a week. Fancier, faster and interactive sites would take about a month. Forget it. That fantasy scenario isn't going to happen. Even if you throw orders at your Intranet, it's not going to help. That's because there are at least three groups that need to get in sync in order to get a website running: your own development team, the management/administration and your employees. There's more red tape in that scenario and unfortunately, red tape never sticks together the way you want it to. So the first thing to do is relax and realize that bringing up my interactive website, is going to take at least a few more months. Yes, we know everyone will tell you that they can do it quicker than that. We also know they're lying through their teeth.

## **7. Managing our site: Webmaster and Webweaver**

Webmaster: It's a job title that gets bantered about a lot, but few people ever focus on what the job is and isn't about. Our webmaster is in-charge of maintaining the hardware, software and HTTP connectivity of our web server. Maintaining the server's actual connections to the Intranet is the network administrator's job. The jobs can be combined; but if we are doing a lot with our website, we'll find that's an impossible job to ask for anyone.

Another job, which many organizations combine with webmaster, is the webweaver. In one word: **Don't**. The webweaver is the person who actually produces the web documents. To do that job well, the person needs to be a good designer, editor, and writer. Did you see a word in that description about being able to dissect IP packets? Nope, You don't expect your desktop publishers to be network engineers, or vice-versa; and the same holds true for the net.



The jobs used to get confused because building and maintaining a website and its pages used to look like the same technical job. We've long left that point of web page development behind. Technical expertise is no longer requirement for webweavers. Webmasters, yes; Webweavers, no. If that confuses you, think of this way: Do you expect writers and editors to know how to run printing presses, or printing press technicians how to write solid prose? We think you see our point.

We plan on changing at least the front page, or "home page", of our website at least once a month. At the same time, we don't want to alienate my users. For example, we don't want to change how our users reach online databases or log onto a chat session, except to make substantive improvements. We want to look *new and innovative*, but not so new that my old users get lost or run into dreaded 40.4 error, which means that the webserver can't make heads or tails of an old URL.

### 7.1 The Hardware and Communication Foundation:

At DRDO, a Wide Area Network links the entire organization. The various laboratories are connected via ISDN links. The connection within a laboratory is through the local LAN via Ethernet or fast Ethernet. The employees at remote locations can also connect to the network through dial-up. This computing and network infrastructure, running TCP/IP, represents substantial bandwidth and gives DRDO employees information on demand.

### 7.2 Software Foundation:

For this computing and network infrastructure to deliver information on demand via the intranet, a number of software components are necessary. We have implemented numerous components of Microsoft Corp. and Netscape Communications Web Technology offerings. Primary servers run on Win NT with Internet Information Server. Forms-based transaction is through ASP using MS-Access at backend and we plan to use SQL or Oracle in future. Internet Explore is the browser of choice. We would like to encourage employees to develop their own web pages.

### 7.3 Navigation Foundation:

The DESIDOC Home Page has a number of features that enhance the user's ability to access information that is important for day-to-day business. Because of the magnitude of information that is available through the website, we developed the navigation tools

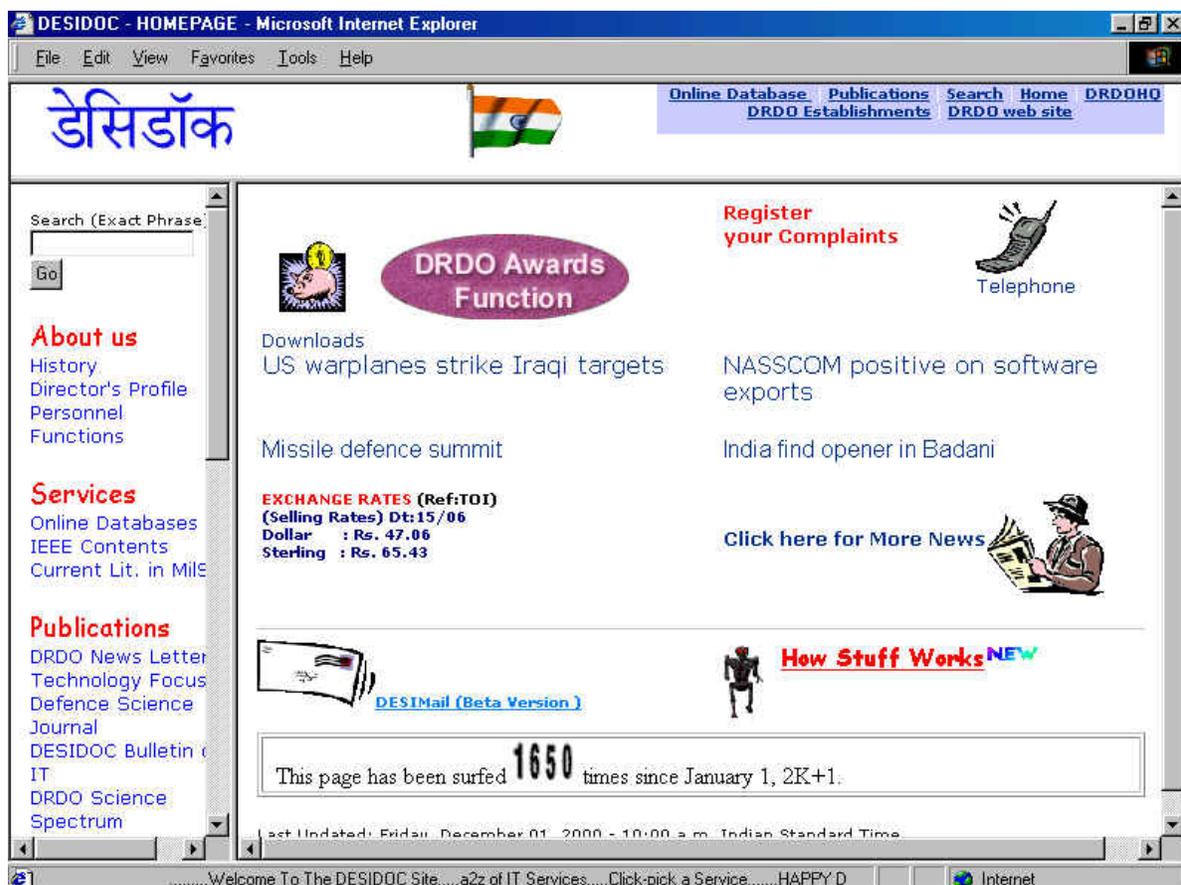
described here: the navigation frame, a search engine and the multiple views of information.

## 8 LINKS ON DESIDOC HOME PAGE

With the expansion of DRONA and its acceptability among DRDO staff, DESIDOC is constantly moving towards the betterment of its website and is constantly adding on new services to give its users a flavor of advancement of DESIDOC towards providing better and the latest services to its user and moving towards the concept of achieving Digital Nervous System for DESIDOC and DRDO.

### 8.1. Home Page [<http://10.2.52.1/desidoc/default.htm>]:

The home page is the starting point for the exploration of our website. The homepage sets the tone for the rest of our site, both by way of an introduction and as a gateway; it acts as a combination magazine cover, billboard, and front page headline. Everyone starts the exploration of the DESIDOC website from the homepage and it reflects the personality of our laboratory. DESIDOC is one of the Main Router Centre (MRC) for the DRONA project. We plan to put on a number of services more than the flavors of Baskin Robbins, useful to the intranet surfers



## 8.2. Services Page:

This includes a list of some basic services provided by DESIDOC.

- **Online Database[<http://10.2.51.4/>] :** This system will help you to search the following
- **Defence Science Library Catalogue :** The search can be based on Title, Author, Keyword, Publisher, Corporate Source, ISBN and/or year of publication for books.
- **Journal Holdings of DRDO Libraries:** Accession on the basis of title, keyword, publisher, ISSN and/or starting year for publications; on the basis of title, author, keyword, Translation number, Accession number for translation database.
- **Newspaper Clippings :** This service enables users to view various news clippings. They can also search news of interest categorized by date, headline, author and / or newspaper.
- **CEP courses handbook :** It comprises of a handbook of various CEP courses conducted in various sister laboratories of DRDO throughout India thus providing a timely information for people to plan out the course to be attended. This requires Adobe Acrobat reader installed at the user end which can be also downloaded from the DESIDOC website.

The screenshot shows a web browser window titled "New Page 2 - Microsoft Internet Explorer". The main content area displays the "OPAC (Online Public Access Catalogue)" interface. At the top, there are navigation links: [Union Catalogue of Periodicals](#), [Translation Database](#), [Newspaper Clippings](#), [SPIE Conference Database](#), [IEEE/IEEE Conference Database](#), [Journal Articles](#), and [Home](#). Below these, it states "Last Updated : 14/05/2001" and "Total No. of Records : 1,12,586". A search instruction reads: "To search an item available in Defence Science Library please fill up the form given below. You may search an item by entering term(s) in any one or all the fields." The search form includes a "Document Type" dropdown menu set to "All", and input fields for "Title", "Author", "Keyword", "ISBN", "Report No.", and "Accession No.". There are "Search" and "Clear" buttons. A button at the bottom says "Click Here to see Books on your account". The footer of the page reads "Developed by Network Services Division, DESIDOC, Delhi". The browser's status bar at the bottom shows "Done" and "Internet".

### **8.3. DRDO Publications :**

This comprises of various regular journals and publications published at DESIDOC

- **DRDO Newsletter** : The user is able to view DRDO News Letter since January 2000. A news letter in the archive is also available since January 1998.
- **Technology Focus** : The user is able to view Technology Focus since December 1999. Archive is also available since June 1997.
- **DBIT** : The user is able to view abstracts from Defence Science Journal since July 1999. Archive is also available since January 1998.
- **DSJ** : The user is able to view abstracts from DESIDOC Bulletin of Information Technology since March 1999. Archive is also available since January 1998.
- **DRDO Science Spectrum** : The user is able to view the various special publications like DRDO Science spectrum. All the papers of Defence Science Spectrum are available on this webpage.

### **8.4 About DESIDOC :**

It contains general information about DESIDOC like its history, Director's profile and information about its personnel.

### **8.5 Personal Information:**

It contains informations like strength of personnel, activities done and the responsibilities of various people in different divisions of DESIDOC. Personal Page is a useful way to introduce our people, to announce promotions or change in job responsibility. The Personal page gives the site a warm, personal tone, and adds to its personal credibility. We have added photographs and plan to put audio and video clips. All these elements help to humanize the subject.

## **9 Other Facilities**

**DESIDOC - HOMEPAGE - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

डेसिडॉक  [Online Database](#) [Publications](#) [Search](#) [Home](#) [DRDOHQ](#)  
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**Publications**  
[DRDO News Letter](#)  
[Technology Focus](#)  
[Defence Science Journal](#)  
[DESIDOC Bulletin of IT](#)  
[DRDO Science Spectrum](#)  
[DRDO Purchase Management](#)  
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[Conr](#)

**NETWORK SERVICES DIVISION**

**Contact**

Name & Desig. of person	Room No.	Tel. No	E-Mail Address	Job Specialisation
Mr. Ashok Kumar, Sc. 'E'		2942183 Extn. 424	<a href="mailto:ak_raj@desidoc.deldom">ak_raj@desidoc.deldom</a>	Head
Dr. A.K. Tyagi, Sc 'D'	111	3972662, Ext. 407 2945071	<a href="mailto:tyagiak@desidoc.drdo.res.in">tyagiak@desidoc.drdo.res.in</a> <a href="mailto:tyagiak@desidoc.deldom">tyagiak@desidoc.deldom</a>	Group Officer
Ms. Veena Makhija, Sc 'D'	111	3969002, Ext. 410 2945071	<a href="mailto:makhija_veena@desidoc.deldom">makhija_veena@desidoc.deldom</a>	Library Database
Sumit Goswami, Sc 'B'	114	3972662, Ext. 409, 3982615	<a href="mailto:sumitg@desidoc.drdo.res.in">sumitg@desidoc.drdo.res.in</a> <a href="mailto:sumitg@desidoc.deldom">sumitg@desidoc.deldom</a>	DRONA, DESIDOC Website
Mr. Anil Sharma TO 'B'	110	3969002	<a href="mailto:sharma_ak@desidoc.deldom">sharma_ak@desidoc.deldom</a>	DRONA

**Activities.**

.....Welcome To The DESIDOC Site.....a2z of IT Ser Internet (Mixed)

- **DRDO Website:** A copy of entire DRDO website, which is available on Internet, is available on DRONA also.

**Online Complaint/Suggestion monitoring System :** The user can log on to the nearest terminal and lodge his complaint or provide any suggestion which is continuously viewed at DESIDOC help desk. The latest status of the complaint is also viewable in the site.

**Using DESIDOC website to fill out forms:** You are not likely to find the whole lot of manual forms around DESIDOC these days. You will however find a number of electronic forms on the site and in near future the form movement will be online too.

Application for Casual /Earned /Sick/ Compensatory off Leave - Microsoft Internet Explorer

File Edit View Favorites Tools Help

DEFENCE SCIENTIFIC INFORMATION & DOCUMENTATION CENTRE  
METCALFE HOUSE, DELHI - 110054  
DEFENCE RESEARCH & DEVELOPMENT ORGANISATION

Application for Casual/Earned/Sick Leave/Compensatory off or Restricted Holiday

Application for  Casual  Earned  Sick  Compensatory off  Restricted Holiday

Name :

Amount of Leave  days w.e.f  To

If Casual or Compensatory leave, mention date (dd/mm/yyyy) :

1.  2.

3.  4.

on account of

Done Internet

**Download Menu Page :** The download menu page gives our users a quick and easy way to download documents, readme files, device drivers, technical support bulletin, service packs, shareware, compressed file archives, latest MP3 music, software revisions, and so on. We plan to use icons to indicate the range of file types available for download, including text files, executable files, games files, and zipped files. Along with each filename, will be included the file format, the size of the file in bytes, and the revision level so that users know exactly what they are getting into.

**Search Engine:** The search engine, which uses a keyword to locate specific resources is a specialised kind of intranet application. Once our intranet grows above a certain size, we will find that some sort of search capability will make it much easier to use.

**Personnel Page:** A personnel page is a useful way to introduce our people, to announce promotions or changes in job responsibilities. The personnel page gives the site a warm, personal tone, and adds to its credibility. We have added photographs and plan to put audio and video clips. All these elements help to humanize the subject.

**Technical Support Page:** The technical support page will include instructions on how to perform a specific operation, such as upgrade, or it might contain a troubleshooting chart designed to help users identify and fix their problems. We plan to use a Intranet Help Desk, where employees with technical problems complete online forms detailing the kinds of problems they are experiencing.

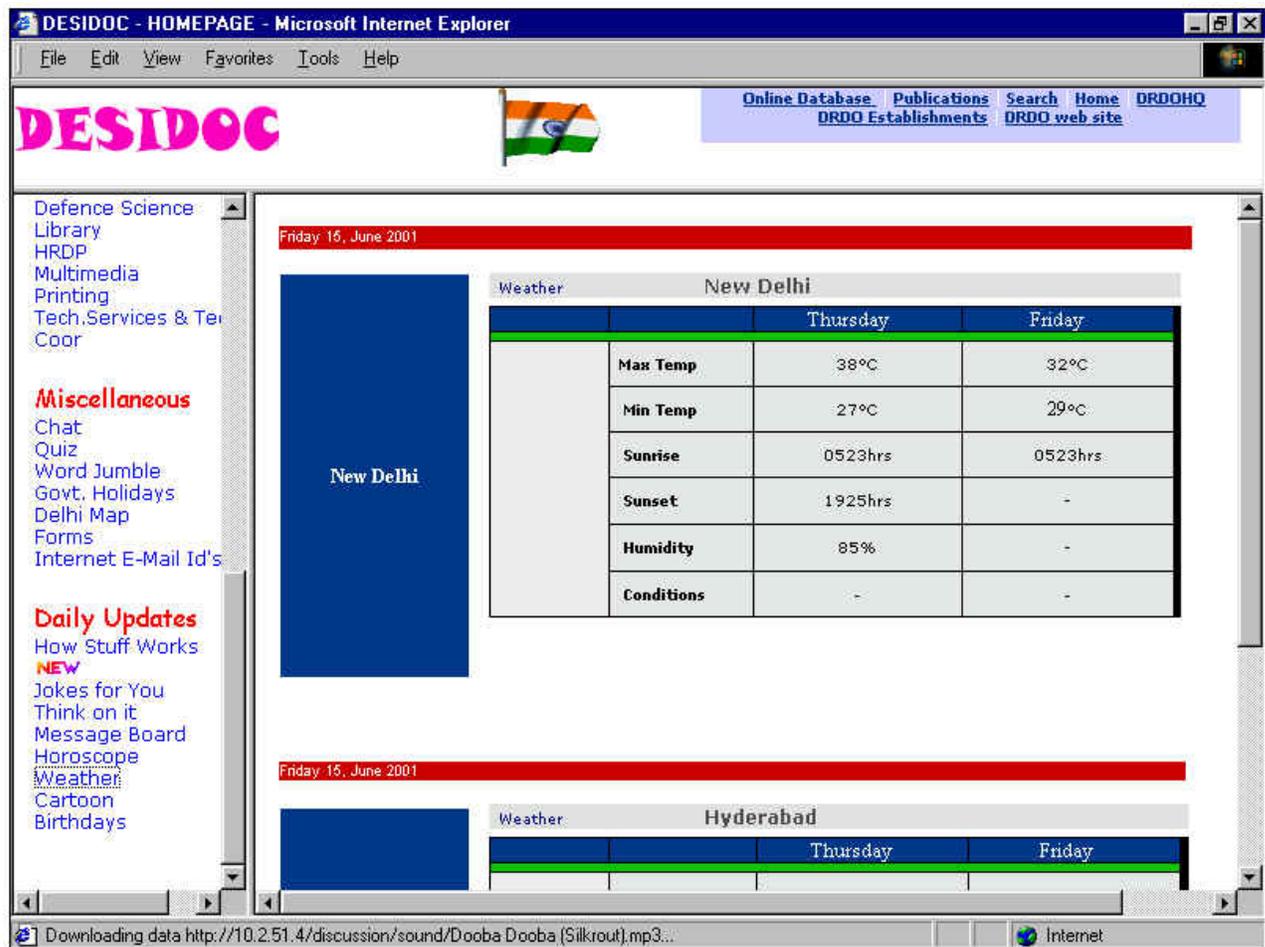
**Technical Report Page:** We will use this to present new or updated technical information to interested parties throughout the company.

**DESIDOC News Page:** This page announces new, upgraded or revised services, new staff, and even new research and development projects. Sometimes this is the only way employees find out what the rest of the world has already learned about the organization from the daily orders.

**Chat Facility :**This enables users of all the labs for an online discussion i.e. chatting

**Message Boards :**By using this service one can submit his views for discussion and any other person logging onto this site can read his views and if willing, can submit his reply to the concerned topic

**Weather Forecast :**The user gets an updated weather forecast and temperatures of metropolitans



**Horoscope:** The DRONA surfer can view his monthly horoscope on this page.

**Quiz:** Some brain twisters to check out your general knowledge

**Word Jumble:** Log on to check out how strong your thesarus is.

**Outbreaking news:**User is also able to view some outbreaking news on this webpage

**Exchange rate is:** Latest Exchange rate for dollar and pound conversion are also available

**Entertainment:**Thinking about the entertainment of DRONA surfers some jokes, cartoons and beautiful quotes are also added on this site

## 10 Looking Ahead

So where do you go from here? Pragmatically speaking, you are going to blast off to your web browser and click onto DESIDOC website. First, let's forget about the nifty new services, programs and all that jazz and talk about real business. Once in place, DESIDOC website is going to be more expensive to run and maintain than your old LAN.

You can count on budgeting in a minimum of two employees during its initial phase of operation: a webmaster and a webweaver. Later on, finances will depend on how your system grows. If the website is a great success, you may find yourself needing to rebuild the entire organization around its network connectivity. That's not likely, but it will happen . So keep your eyes open.

## **11 FUTURE OF WEB**

The web will continue to grow, grow and grow, and...well, you get the idea. For a time, the web will grow so fast that it's going to outstrip the ability of DRONA to carry it. The web's audience is going to continue to grow. The DESIDOC website will be the tie that binds the laboratories of DRDO into one organization. We are not talking about the warm feelings and the brotherhood of man, we are talking about a fundamental shift in the way organizational transactions occur. Some business will move lock, stock, and barrel onto the web. Today, we only talk about having a organization. The website is going to accelerate that trend.

By the year 2002, our most of the work will be running on the Intranet with some proof against failures. Most of our users will be working with a universal interface that makes reading the boss' memo on their machine, using the organizational database to check the facts for their response to the boss or cash-purchase, and then sending a reply to the accounts or administration, all parts of a seamless whole. Besides making work faster, since you won't need to walk from one application to another, training costs will go down. Today, an office worker needs to know half-a-dozen applications to be the office-computing wizard. Tomorrow, since everyone will need to know two or three applications, more people will be using their computers more efficiently and taking less time to reach that level of proficiency. This may have two effects in the organization. Some business will work at about the same rate due to what we call the dither factor, but moving towards more perfection. The intranet can bring a revolution to your workplace, if you have the courage to change the way your organization does transactions. *Just do it.* Another, similar change is that even now, the white collar elite refuses to work with computers. The day for that sort of outlook is long since gone; and anyone who thinks like that is already holding your organization back. Tomorrow, they won't simply be burdening your business, they'll be an anchor around your neck dragging it to its doom. Tomorrow, real organizational power will be belonging to those who can use the unparalleled communication and information abilities of the intranet. It's time to stop putting up with featherbedding executives and get rid of them. They've got their golden parachutes; so we wouldn't shed any tears for the executive who insists that a web is just something a spider makes.

Transformation, metamorphosis, evolution in action - the rise of DESIDOC Website is all this and more. You know the issues now; you know enough of the details to make informed decisions. Now, it's up to you. The new day is what you will make it. Ignore the changes, and you'll have cause to regret it. Ride the wings of change, though, and you can take our organization to new heights. Enjoy the trip. It will be a hell of a ride, but the rewards at the end will make the voyage more than worth the effort. We wish you a Happy Surfing of our site.