

Document Name: Back Story (Latest Information First)

Cyber Patriots Task ForceMay 2019

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Initiative Name	Cyber Security Patriots Task Force
Document Name	Cyber Security Strategy of India
Document Owner	Sameer Kochhar
Security Classification	Limited Circulation
Document Status	Draft
Date of Release	

Version Control

Version No	Issue Date	Change Details
1	9th March 2019	
1.1	21st May 2019	List of Participants Update



7th Communication: WhatsApp Message, 16th May 2019

Message 2:

My personal request to you is that we really need to grow. There are 100 of us currently. Can each one of us not get another 5 to join? It is important for this to become a movement. I would be truly grateful if you can make 5 meaningful member additions. Thanks in anticipation.



6th Communication: WhatsApp Message, 16th May 2019

Message 1:

Greetings, you must have seen my mail from yesterday. For easier working, we are creating four groups. 1) Policy Group 2) OT Group 3) BFSI Group and 4) Services Group. These would also be formed on WhatsApp. These groups can simultaneously work on their areas of expertise. All Cyber Patriots will be divided across these groups depending on their domain area. All key papers and inputs would be shared across groups. Since, my mail yesterday, I have received one paper from Dr. Anupam Saraph and another one from Dr. C. Muralikrishna Kumar of NITI Ayog. I am sending this message through the broadcast route. The message will be sent to everyone but the replies come only to me. In the 4 functional groups, all communication can be bi-directional. I will forward the inputs received in the following messages.

Encl(s):

- 1. Four groups
- 2. Article by Dr Anupam Saraph



Encl 1: Four groups

Services Group

S/N	Sector	Industry Segment	Name	Organisation	
1	Services	IT Industry	Akilur Rahman	ABB India Ltd	
2	Services	IT Industry	Ankush Chowdhary	Amazon Web Services	
3	Services	IT Industry	Archie Jackson	Genpact	
4	Services	Hospitality	Ashish Khanna	Oberoi Gp	
5	Services	IT Industry	Industry Debashis Singh Mphasis Limited		
6	Services	IT Industry	Deepak Kalambkar	Marvel Data Services LLP	
7	Services	IT Industry	Dhruv Khanna	Data Resolve Technologies Private Limited	
8	Services	IT Industry	Dilip Panjwani	L&T Infotech ltd	
9	Services	IT Industry	Ganesh Vishwanathan	Aithent Tech	
10	Services	IT Industry	Gaurav Agarwal	Symantec Software Solutions Pvt Ltd	
11	Services	FinTech	Gautam Pande	Mastercard	
12	Services	IT Industry	Govind Rammurthy		
13	Services	IT Industry	Kesavardhanan Jayaraman K7 Computing Pvt Ltd		
14	Services	IT Industry	Mohit Makol	Symantec Software Solutions Pvt Ltd	
15	Services	IT Industry	Mr Om Kumar	BlueEarth Softwares Group.	
16	Services	IT Industry	Murtaza Bhatia	Dimension Data India,	
17	Services	Media	R D Bhatnagar	Dainik Bhaskar Group Db Corp Limited	
18	Services	Manufacturing	Rajiv Arora	Siemens Ltd	
19	Services	IT Industry	Ravinder Arora	Iris Software	
20	Services	IT Industry	Sandeep Bhambure	Managing Director	
21	Services	IT Industry	Sapan Talwar	ARISTI NINJA	
22	Services	PSU-Bank	Ajay Kumar	Vijaya Bank	
23	Services	Academia	Anupam Saraph	Symbiosis Institute of Computer Studies and Research	
24	Services	Consultancy	Gautam Kapoor	Deloitte	
25	Services	Consultancy	Jaspreet Singh	KPMG	
26	Services	Manufacturing	Mashi Thapar	Jaquar	
27	Services	Manufacturing	Rajiv Agarwal	HAL	
28	Services	vices Manufacturing Vikram G R Diageo India			



Policy Group

S/N	Sector	Industry Segment	Name	Organisation	
1	Policy	Academia	Akash Kundu	CBI Academy	
2	Policy	Consultancy	Akhilesh Tuteja	KPMG	
3	Policy	Academia	Anil Koushal	Indian Institute of Management Indore	
4	Policy	Academia	Anjali Kaushik	Management Development Institute	
5	Policy	IT Industry	Ankush Chowdhary	Amazon Web Services	
6	Policy	Academia	Anupam Saraph	Symbiosis Institute of Computer Studies and Research	
7	Policy	Government	B K V V Prasad Rao	NIC Andhra Pradesh	
8	Policy	Think Tank	C. Muralikrishna Kumar	NITI Aayog	
9	Policy	Consultancy	Cmde J Harsha Vardhan	Deloitte	
10	Policy	Academia	Deepak Phatak	IIT Bombay	
11	Policy	Consultancy	Dinesh K Pillai	Acquisory Risk Consulting Pvt. Ltd.	
12	Policy	Government	Dr Lalthlamuana	Mizoram State e-Governance Society (MSeGS)	
13	Policy	Consultancy	Gautam Kapoor	Deloitte	
14	Policy	FinTech	Gautam Pande	Mastercard	
15	Policy	Government	Golok Kumar Simli	Ministry of External Affairs	
16	Policy	Academia	H R Krishnamurthy	Indian Institute of Science	
17	Policy	Consultancy	Jaspreet Singh	Ernst & Young Llp	
18	Policy	Independent	N Vijayaditya		
19	Policy	Law Firm	Pratibha Jain	Nishith Desai Associates	
20	Policy	Consultancy	Rahul Aggarwal	PricewaterhouseCoopers Pvt Ltd	
21	Policy	Manufacturing	Rajeev Agarwal	Hindustan Aeronautics Limited	
22	Policy	Government	S S Sarma	CERT-IN	
23	Policy	Government	Saibal Sarkar	NIC	
24	Policy	Government	Sanjay Behl	CERT-IN	
25	Policy	Consultancy	Sivarama Krishnan	PricewaterhouseCoopers Pvt Ltd	
26	Policy	Consultancy	Srivathsa Ramantha	Deloitte	
27	Policy	Bank - PSU	Ajay Kumar	Vijaya Bank	
28	Policy	Manufacturing	Manshi Thapar	Jaquar	
29	Policy	Manufacturing	Pradeep Chaudhary	Balrampur Chini mills	
30	Policy	Consultancy	Prashant Gupta	Grant Thorton	
31	Policy	Government	Sanjay Jaju	Department of Defence Production	
32	Policy	IT Industry	Sapan Talwar	ARISTI NINJA	
33	Policy	Manufacturing	Vikram G R	Diageo	
34	Policy	IT Industry	Archie Jackson	Genpact	



BFSI Group

S/N	Sector	Industry Segment	Name	Organisation	
	BFSI	Bank	Abhijit Shah	Development Credit Bank	
	BFSI	Bank - PSU	Ajay Kumar	Vijaya Bank	
	BFSI	Insurance - Life	Ashish Shah	Star Union Dai-ichi Life Insurance Co. Ltd	
	BFSI	AMC	B R Nath	Edelweiss	
	BFSI	Bank - Co-operative	Col Vinod V Shah	The Gujarat State Co-operative Bank Ltd	
	BFSI	Academia	Deepak Phatak	IIT Bombay	
7	BFSI BFSI	Finance	Dominic Vijay Kumar	Art Affordable Housing Finance Indian Institute of Science	
	BFSI	Academia NBFC	H R Krishnamurthy		
	BFSI	Bank - PSU	Harender Singh J N Mallikarjun Rao	Capital Trust Limited Syndicate Bank	
	BFSI	Bank - PSU	Jagmohan Singh	Canara Bank.	
	BFSI	Finance	Joydeep Dutta	Central Depository Services Limited	
	BFSI	Insurance - Life	Kumar Sauray	Edelweiss Tokio Life Insurance Company Limited	
	BFSI	Finance	Makesh Chandramohan	Aditya Birla Capital Ltd	
	BFSI	Finance	Manikant R Singh	ORBIS Financial Corporation	
	RFSI	Bank - SFB	Manish Sehgal	ALL Small Finance Bank	
	BFSI	AMC	Mannan Godil	Edelweiss Asset Management Ltd	
18	BFSI	Finance	Manoj Sarangi	National Securities Depository Limited	
	BFSI	Payment Bank	Mr Nilesh Gade	Aditya Birla Idea Payments Bank Ltd	
20	BFSI	Finance	Nafees Ahmed	Indiabulls Group	
21	BFSI	Bank - MNC	Neeraj Chandra	Abu Dhabi Commercial Bank Ltd	
	BFSI	Bank - PVT	Neeraj Naidu	IDFC First Bank Ltd	
	BFSI	Bank - PSU	Premnath Pandey	State Bank of India	
	BFSI	Bank - PVT	Rajesh Hemrajani	IDFC Bank Ltd	
	BFSI	Bank - PVT	Rajesh Thapar	YES BANK Ltd	
26	BFSI	Bank - PVT	Sameer Ratolikar	HDFC Bank Ltd	
27	BFSI	Finance	SanjayTiwari	IIFL	
28	BFSI	AMC	Sanjivan Shirke	UTI Mutual Fund	
29	BFSI	Insurance - General	Shashank Bajpai	Acko General Insurance Limited	
30	BFSI	Exchange	Shivkumar Bhasin	NSE	
31	BFSI	Exchange	Shivkumar Pandey	BSE Ltd	
32	BFSI	Consultancy	Sivarama Krishnan	PricewaterhouseCoopers Pvt Ltd	
33	BFSI	Insurance - Life	Sunder Krishnan	Reliance Nippon Life Insurance,	
34	BFSI	Bank - PSU	Suryanarayanan.K	Central Bank of India	
35	BFSI	Insurance - Life	Vikas Yadav	Max Life Insurance	
36	BFSI	Bank- Pvt	Vishal Madan	Capital Bank	
37	BFSI	Bank - PSU	Vivek Gupta	Allahabad Bank	
38	BFSI	Bank - PVT	Zuzar Tinwalla	Standard Chartered Bank	
40	BFSI	Academia	Anupam Saraph	Symbiosis Institute of Computer Studies and Research	
41	BFSI	Consultancy	Gautam Kapoor	Deloitte	
42	BFSI	Consultancy	Jaspreet Singh	KPMG	
43	BFSI	Manufacturing	Mansi Thapar	Jaquar	
44	BFSI	IT Industry	Archie Jackson	Genpact	



Operational Technology Group

	ational Technology			
S/N	Sector	Industry Segment	Name	Organisation
1	Operation Technology	Manufacturing	Ajitsingh Nawale	Mahindra Cie Automotive Ltd
2	Operation Technology	Manufacturing	Anand Ruhela	Kwality Limited
3		Hospitality	Ashish Khanna	Oberoi Gp
4	Operation Technology	Transport & logistics	Ashish Mathur	Allcargo Logistics Ltd.
5	Operation Technology	Power & Energy	Avaneesh Vats	Energy Efficiency Services Ltd
6	Operation Technology	Manufacturing	Balaji Aravamudhan	United Phosphorus Limited
7	Operation Technology	PSU - Oil & Gas	Dharam Raj	Oil and Natural Gas Corporation Ltd (ONGC)
8	Operation Technology	Power	Dharmendra Kumar	Tata Power Delhi Distribution,
9	Operation Technology	Pharmaceutical	Dinesh Kumar	Alkem Laboratories Ltd.
10	Operation Technology	Manufacturing	Dr Vineet Bansal	Greenply Industries Ltd
11	Operation Technology	Government	Golok Kumar Simli	Ministry of External Affairs
12	Operation Technology	PSU - OIL & Gas	Jayant Gupta	Hindustan Petroleum Corporation
13	Operation Technology	Manufacturing	Kamal Dhamija	Apollo Tyres Ltd
	Operation Technology	Fertiliser	Makarand Sawant	Deepak Fertilisers And
14				Petrochemicals Corporation
15	Operation Technology	Power & Energy	Manoj Kumar	HPCL-Mittal Energy Ltd
16	Operation Technology	Manufacturing	Manoranjan Kumar	Shree Cement Ltd
17	Operation Technology	Manufacturing	Mansi Thapar	Jaquar
18		Manufacturing	Mudit Agarwal	Uflex Limited
19	Operation Technology	Power & Energy	Nagsen Wankhade	Energy Efficiency Services Ltd
20	Operation Technology	Manufacturing	Niranjan Bal	Hindalco Industries Ltd
21	Operation Technology	Power & Energy	Nitish Vyas	Adani Electricity Mumbai Ltd
22	Operation Technology	Manufacturing	Parshant Kumar	KHD Humboldt Wedag
23	Operation Technology	Manufacturing	Pradeep Chaudhary	Balrampur Chini Mills Ltd
24	Operation Technology	Manufacturing	R D Malav	Jindal Poly Films Ltd
25	Operation Technology	Engineering and Technical Services	R Priyamvada	Engineers India Ltd
26	Operation Technology	Manufacturing	Rajeev Agarwal	Hindustan Aeronautics Limited
27	Operation Technology	Manufacturing	Rajiv Arora	Siemens Ltd
28	Operation Technology	Manufacturing	Raman Krishnamoorthy	Bata India Limited
29	Operation Technology	Power & Energy	S Samanta	Tata Power Delhi Distribution Ltd
30	Operation Technology	Manufacturing	S Srikanth	TVS Motor Company Ltd
31	Operation Technology	Pharmaceutical	Sanjay Nandavadekar	Cipla
32	Operation Technology	PSU - Consultancy	Satish Nangia	NBCC (India) Limited
33	Operation Technology	Power	Satya Gupta	Tata Power Delhi Distribution
34	Operation Technology	Pharmaceutical	Subhajit Deb	Dr. Reddy's Laboratories Ltd.
35	Operation Technology	Manufacturing	Surendra Bisht	Jindal Stainless (Hisar) Ltd.
36	Operation Technology	Minerals (SOE)	Surendra Kumar Upadhyay	NMDC Limited
37	Operation Technology	Oil & Gas	Tarun Sharma	Gujarat Gas Limited
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38	Operation Technology	Manufacturing	Vikram GR	Diageo India
39	Operation Technology	Construction	Vinay Khargonkar	Larsen & Toubro Limited
40	Operation Technology	Manufacturing	Vipul Anand	HSIL Limited (Formerly Hindustan Sanitaryware & Industries Ltd)
41	Operation Technology	Academia	Anil Koushal	Indore
42	Operation Technology	Academia	Anupam Saraph	Symbiosis Institute of Computer Studies and Research
43	Operation Technology	Consultancy	Gautam Kapoor	Deloitte
44	Operation Technology	Consultancy	Jaspreet Singh	KPMG
45	Operation Technology	Finance	Manikant R Singh	Orbis Financial Services Limited
46	Operation Technology	PSU- Oil & Gas	Dharam Raj	ONGC
47	Operation Technology	Law Firm	Pratibha Jain	Nishith Desai Associates
48	Operation Technology	Government	Sanjay Jaju	Department of Defence Production
49	Operation Technology	IT Industry	Sapan Talwar	ARISTI NINJA
50	Operation Technology	Manufacturing	Vineet Bansal	Greenply
51	Operation Technology	Manufacturing	Kavitha	HAL
52	Operation Technology	Academia	Dr Sangal Velu	Acharta School of Management
53	Operation Technology	Consultancy	Anil	KPMG
54	Operation Technology	IT Industry	Nishant	Fortinet
55	Operation Technology	IT Industry	Archie Jackson	Genpact
56	Operation Technology	Academia	Akash Bhardwaj	University of Petroleum and Energy Studies



Encl 2: Response by Dr Anupam Saraph

Dear Sameer, here are my quick responses to your questions.

1. What are the felt needs for cyber security from: a. CISO Perspective b. Business Perspective The ability to protect my relationship with my customer is the number one need from a business perspective. Current excursions into outsourcing, creating or using platforms like India Stack, where my customer relationship is completely out of my control, are posing enormous risk not merely to my data but to my business itself.

From a CISO perspective the excursions of my CTO to outsource technologies and join forums, like iSprit, where *my* security practices and business needs carry no weight are the number one cyber security risk. These companies and forums are not exposed to the loss of my customers, my business, its business processes, or even the legal compliances and international best practices in my sector.

- 2. What are the gaps in what industry is offering? a. Products b. Services c. Advise

 The IT industry is offering technology and platforms for technology based authentication. However they miss the point that you cannot and must not outsource the most important part of a business transaction: identification of the transacting parties. This is the biggest security hole that has been offered as products, services and advise. It is evident that the industry has no understanding of business processes or simply don't care to protect my business and customers. The failure of technology companies to understand that no one needs technology solutions, they need governance support is also a big gap in their offerings. In their failure to recognize that by causing outsourcing as solutions they not only destroy my connection with my customers, they weaken my ability to deal with the problems of my business.
- 3. In what scenarios can industry engagements increase vulnerabilities? As a business, I increase my vulnerability by outsourcing my relationship with my customers or by altering my business processes to suit the needs of technology solutions offered by technology vendors.
- 4. How much do you think market lead pressures and target pressures make vendor push suboptimal solutions?

While target pressures definitely cause a push in sales, it is the failure of research and development in developing meaningful solutions that has pushed technology as solutions when it is mostly a problem.

I think the big challenge before the RBI Governor is to undo the changes in business processes as a result of the technology Trojan horses that have invaded the banking sector. Re-KYC is one which is destroying customer records and causing financial fraud in the financial world. Money wallets, Aadhaar payments and UPI are another that are enabling the creation of money and laundering of money.

The new Cyber Security Coordinator must take up these challenges as a national emergency and ensure the RBI, the ECI, the other national institutions undertake the dismantling of these risks.

Best regards, Anupam

DEVELOPMENT FOUNDATION

SKOCH Cyber Patriots Task Force

5th Communication E-Mail: 15th May 2019

Dear

The second meeting of Cyber Patriots Task Force was held in Bengaluru at the Oberoi Hotel on May 9th, 2019. CISOs from banks, defence manufacturing, IT Services and MNC manufacturing participated. Some of the learning's were as follows:

- 1. Bank mergers are posing new security challenges for the short to medium term.
- 2. The outsourcing model is posing a higher degree of risk.
- 3. Customising solutions is not possible and privileged identity management is a big area for concern.
- 4. Cyber Security is a specialised job, while there is focus on movement of CISOs to business, there is no attempt to give business team's exposure to security.
- 5. The biggest resistance to security comes from IT vendors themselves who would like it to take a back seat.

These are just a few of the several feedbacks. This has got me thinking on doing a small note based on your inputs. I seek answers to the following questions:

- 1. What are the felt needs for cyber security from: a. CISO Perspective b. Business Perspective
- 2. What are the gaps in what industry is offering? a. Products b. Services c. Advise
- 3. In what scenarios can industry engagements increase vulnerabilities?
- 4. How much do you think market lead pressures and target pressures make vendor push sub-optimal solutions?

I would really appreciate if you can provide your inputs on the above at your early convenience. In the meanwhile I also had the opportunity to call upon Mr. Shaktikanta Das and brief him on our work. He was very supportive and promised to examine our recommendations and act on them wherever suitable. Personnel from RBI may also participate in the exercise from time to time. One of his ideas was to also examine role of disruptive technologies e.g. AI and Block Chain etc. and come back with our suggestions. I also met Maj General Rajesh Pant, the new National Cyber Security Coordinator. He too was very supportive of our work and will be participating. He has agreed to write the chapter on "The Threat Landscape." I look forward to your mail. Once again, our Cyber Patriot Congress is on 17th August 2019 at the Constitution Club, New Delhi.

Thanking you,

Yours sincerely,

Sameer Kochhar Chairman SKOCH Group +91 9811089604



Participant List of Second Meeting of Cyber Patriots Task Force, Bangalore:

- 1. Mr Debashis Singh, CISO, Mphasis
- 2. Mr Vikram G R, CISO, Diageo
- 3. Mr Ajay Kumar, CISO, Vijaya Bank
- 4. Mr J N Mallikarjun Rao, CISO, Syndicate Bank
- 5. Mr Rajiv Agarwal, GM, IT & CISO, Hindustan Aeronautics Limited
- 6. Mr Sameer Kochhar, Chairman, SKOCH Group
- 7. Dr Gursharan Dhanjal, MD & Editor, SKOCH Group
- 8. Mr Kunal Chauhan, President, SKOCH Group
- 9. Mr Stefan Kaushik, Business Analyst, SKOCH Group



4th Communication E-Mail, 29th April 2019

Dear

Welcome aboard!

It is my greatest pleasure to have you as part of our cyber patriot team that has come together to give this Cyber Security Initiative the much needed inputs. It is our pleasure to announce that we have flagged off the initiative formally on March 23, 2019 at Constitution Club of India, New Delhi where cyber patriots from different parts of the country brainstormed and discussed the urgent need for cyber security framework in the country. However, to ensure that you do not miss on any development or discussion so far, please allow me to walk you through the timeline from the thought to where are we so far.

The thought

Cyber threat is real. So is cyber terrorism. As we are making inroads in the digital world, we are also increasing our vulnerability. But how prepared is India against cyber-crimes, cyber monopolies and in the wake of a potential cyber war? You would be surprised to know that there are less than 1000 Indians with the requisite skill sets and the ability to contribute.

This is when the idea of forming a cyber security task force got its roots and that is when I decided to get as many of these 1,000 individuals on board and you are one of those 1000 Indians with the skill.

The objective

Through this task force, we should be able to identify the various contours of the Indian cybersecurity system through various views like Policy (national, corporate, individual, etc.); Verticals (financial services, homeland security, etc.); Technology (AI, IoT, etc), Diplomacy and points of multilateral negotiations (data localizing, etc).

Once we are able to identify and detail these, we can evolve a coherent and publish as a bluebook that can be updated periodically.

The First Meeting

We formally got the ball rolling on March 23 2019 when all the delegates and select members met for a panel discussion followed by a boardroom meeting to discuss the action plan. *Please find attached the list and details on the same*. The meeting was a mixed bag, given the varied stakeholders and experts present, with lot of inputs, few differences and a common passion to work towards this goal. You can access the panel discussion by **clicking here** and for the boardroom meeting, please **click here**. To know about the attendees for the above two, please check attachment.

However, to give you a brief idea of the "Work so far", here are the pointers from our first meeting.

1. The document, as of now, is named "National Cyber Security Strategy of India".



- 2. The opening section will throw light on the current status, the progress and the much needed articulation.
- 3. I suggest the following structure for the first section:
 - a. Global Scenario
 - b. Factors driving National Cyber Security Strategies
 - c. The Indian context (This includes Facilities, People both in Skill and HR, Funds, Systems, Competitive Advantages, Areas for Upgrade, Policy gaps, Factors driving future course, need articulation for the strategy)
- 4. Economic Rationale for the Strategy

Onus taken thus far

- Mr Sivaraman Krishnan, Leader- Cyber Security, PwC is preparing a draft paper on the first section (Point 3).
- Prof Anjali Kaushik, Professor, Management Development Institute (MDI), who has done extensive work on Information Security Assurance Framework, has shared some of her valuable work with us. Attached is the document.
- Mr Akhilesh Tuteja, Global Co-Leader- Cyber Security, KPMG is working on a paper on "Economic Rationale and the cost of not having one"
- Mr Brijesh Singh, Inspector General of Police- Cyber, Maharashtra had a different viewpoint on the topic and has been requested to share his input document.
- Everyone has enthusiastically and sincerely agreed to build this workforce to a solid 1000-member group and will be recommending resource persons from the technology and operations.

The Step Ahead

Now that you are one of the Cyber Patriots, we expect your input and feedback in the Phase II of the initiative. The phase II includes:

- Identifying teams and coordinators for the chapters based on their expertise and interests
- Teams to create draft which can then be analysed and brainstormed by the task force.
- Chapters to be presented on 17th August, 2019 at the first Cyber Patriots' Summit to be held in New Delhi. Do keep your calendar blocked for the same.
- Book to be published and released in Q-4 of 2019.

Now that you have joined us in this mission, we believe that your expertise will help this framework immensely. Given your busy schedules, we will keep our communications primarily through e-mails, calls and so on, and sometimes have smaller meetings at New Delhi or Mumbai. You can contribute through discussions, inputs, write-ups and feedback. Even though your involvement is totally voluntary with no financial or legal liability, it becomes an unsaid responsibility towards the treasure trove of knowledge and expertise you have on the subject.

We will look forward to enriching this vision and with everyone's consorted efforts; the book should be able to see the light of the day by the end of this year.

I would request you to kindly acknowledge the receipt at skoch@skoch.in.



Look forward to hearing from you soon.

Best regards,

Sameer Kochhar Chairman SKOCH Group +91 9811089604



3rd Communication: E-Mail, 26th March 2019

Dear

I am happy to inform you that the Cyber Patriots Initiative driven by SKOCH Group was launched formally on March 23, 2019 at the Constitution Club of India through a panel discussion. You can watch the discussion here.

This was followed by the first meeting of the task force. You can see the meeting <u>here</u>. The list of participants is enclosed.

It was clear that there are stakeholders whose interest is top-level policy, others who would like to see an operations or technologies view etc. We recognise the importance of all of these and propose to hold meetings consisting of different types of stakeholders to cover all areas eventually. For the purposes of focus the first meeting was on Policy Issues and examined some of the areas that are important from a government perspective.

After detailed discussions, several decisions were taken. The initial actions are as follows:

- 1. The working name for the document would be "National Cyber Security Strategy for India."
- 2. Under the first section of the book, we would take stock of the current progress and need articulation.
- 3. Accordingly, I suggest, the first section could be structured as below:
 - a. Global Scenario
 - b. Factors Driving National Cyber Security Strategies
 - c. The Indian Context (current policy environment, assets, institutions etc)
 - i. Facilities
 - ii. People (skills and HR)
 - iii. Funds
 - iv. Systems
 - v. Competitive Advantages
 - vi. Areas for Upgradation
 - d. Policy Gaps
 - e. Key Factors Driving Future Course (eg Virtualisation, 5G, AI, IoT etc)
 - f. Need Articulation for the Strategy
- 4. Economic Rationale for the Strategy

Since Sivaram of PwC had come prepared for inputs on 3 above, he was requested to put together a draft paper. His presentation is enclosed.

Similarly, Anjali Kaushik has also done extensive work on Information Security Assurance Framework for e-Governance was requested to share some of her work. The document sent by her is enclosed.

Akhilesh Tuteja of KPMG was requested to work on a paper on Economic Rationale and the cost of not having such a strategy.



Brijesh Singh of Maharashtra Police has suggested an alternative view point and is requested to share his input documents.

Moving forward, I would be having a few one on one discussions to better crystallise thoughts on other chapters and areas of action. I look forward to your inputs and feedback.

One area that everyone has promised to help on is to help expand this group and recommend resource persons from the technology and operations sides to join us. We need to have a 1000 strong group.

The first National Cyber Patriot Convention is scheduled on 17th August 2019 at Constitution Club of India, New Delhi. Do keep your calendar blocked.

Best regards,

Sameer Kochhar Chairman SKOCH Group +91 9811089604

Encl(s):

- 1. Participants to the SKOCH Cyber Patriots Task Force Meeting I
- 2. Securing Indian Cyber Space PWC Inputs
- 3. Information Security Assurance Framework for e-Governance MDI Inputs



Encl 1: Participants to the SKOCH Cyber Patriots Task Force Meeting I

SKOCH Cyber Patriots Task-force Meeting 1

23rd March 2019

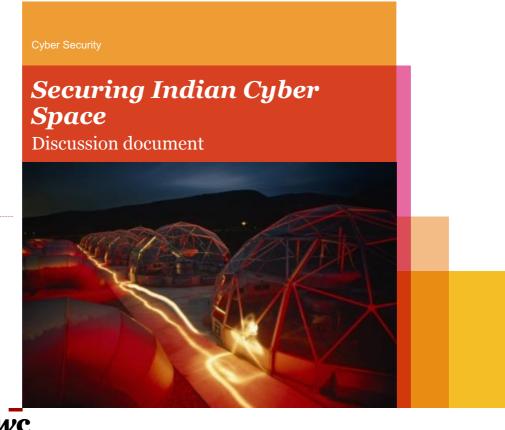
12:15-14:00 Hrs Boardroom, Constitution Club of India, New Delhi

Participants:

- Mr Akhilesh Tuteja, Global Co-Leader Cyber Security, KPMG
- Prof Anjali Kaushik, Information Management, Management Development Institute (MDI)
- Mr Avaneesh Vats, Deputy General Manager IT, Energy Efficiency Services Ltd
- Mr Bhushan Mohan, Former Principal Consultant, NeGD, MeitY
- Mr Brijesh Singh, Inspector General of Police Cyber, Maharashtra
- Dr C Muralikrishna Kumar, Senior Advisor-ICT, NITI Aayog
- Mr Gautam Kapoor, Partner, Deloitte India
- Mr Golok Kumar Simli, Principal Consultant & Chief Technology Officer, Passport Seva, Ministry of External Affairs
- Dr Gulshan Rai, National Cyber Security Coordinator
- Mr Jaspreet Singh, Partner Cyber Security, Africa, India & Middle East (AIM), Ernst & Young
- Mr Mannan Godil, CISO Information Security Group, Edelweiss Rural & Corporate Services Limited
- Mr Nafees Ahmed, CIO, Indiabulls Group
- Dr N Vijayaditya, Former Director General, NIC
- Ms R Priyamvada, IT Head, Engineers India Ltd (EIL)
- Dr Shefali Dash, Former Director General, National Informatics Centre
- Mr Sivarama Krishnan, Leader Cyber Security, PwC
- Mr S S Sarma, Director, CERT-In, MeitY



Encl 2: Securing Indian Cyber Space - PWC Inputs



pwc

Strictly Private and Confidential **Draft** January 2017



Encl 3: Information Security Assurance Framework for e-Governance – MDI Inputs

	Information Security Assurance Framework for e-Governance (ISAF) 2016
Informa	ation Security Assurance Framework for e-Governance
-Introdu	action and Overview
March 20	16
DOCUMENT	T NUMBER & VOLUME
Draft prepa	red by
Managemen ^a	t Development Institute, Gurgaon
Study Comn	nissioned by
Department	of Electronics and Information Technology,
viii iistry of C	ommunication and IT

DEVELOPMENT FOUNDATION

SKOCH Cyber Patriots Task Force

2nd Communication: Follow-up E-Mail, 9th March 2019

Dear

Thanks for joining the Cyber Patriot Initiative. Moving forward the plan is as follows:

Phase-I

- 1. Visualise Cyber Security Doctrine as a book.
- 2. Make Chapterisation Plan.
- 3. Open for comments and to identify areas that need to be covered in each Chapter. (I enclose the draft plan and seek your help in fine tuning and identifying content in each chapter through sub-heads perhaps). Feel free to propose additional chapters. The idea is to create a template.
- 4. Formal launch of the initiative and a public discussion on the content proposed to seek inputs and share ideas.
- 5. This is scheduled on March 23, 2019 at Constitution Club of India, New Delhi from 09:00 to 12:00 hrs.
- 6. People on this discussion are Dr. Gulshan Rai (NCSC); Akhilesh Tuteja (KPMG); Dr Anjali Kaushik (MDI); Jaspreet Singh (E&Y); Sivarama Krishnan (PwC); Gautam Kapoor (Deloitte); Brijesh Singh (Maharashtra Police); Gautam Pande (MasterCard); Dr Shefali Dash (former DG-NIC); Shivkumar Pandey (BSE).
- 7. The first advertisement on this was published on Monday, 11th March 2019 in Indian Express (National) and in Mint (Bangalore, Chennai and Ahmedabad).
- 8. Members are invited to participate a) In person (just mail us), no delegate fee would apply or b) watch and comment on Facebook live.

Phase-II

- 1. Depending on the interest and expertise, identify teams and coordinators for each Chapter.
- 2. Teams to create drafts and then open them for discussion.
- 3. Local workshops and face to face can be organised.
- 4. Finalise the draft chapters and open for comments and discussion.
- 5. Chapters to be presented on August 17th, 2019 at the first Cyber Patriots Summit at New Delhi. Do block your calendar now.
- 6. Based on inputs and discussions, chapters need to be finalised.
- 7. Book to be produced and released in Q-4 2019 time frame.

This is where we are, look forward to your suggestions and more importantly your contributions towards the chapters and various sections planned. You may propose more experts that could be approached to contribute on various areas.

Thanks and regards,

Sameer Kochhar Chairman SKOCH Group



Encl(s):

- 1. Tentative Structure of the Book
- 2. National Release announcing the Task Force

S C C C C

SKOCH Cyber Patriots Task Force

Encl 1: Tentative Structure of the Book

India's Cyber Security Doctrine

- 1. Introduction
 - a. Defining Cyber and Life in a Networked World
 - b. Evolution of Cyber Threats
 - c. Status of Cyber in India
 - d. Cyber Attacks and Cyber Espionage
 - e. Disruptions in BFSI, Payments System, Government and Industry
 - f. Types of Threats and Response
 - g. Need for a Cyber Security Doctrine
 - h. Existing Cyber Security Framework and Policy
 - i. Cyber vs Digital India
 - j. Cybersecurity as a public good
 - k. Producing cyber security vs managing insecurity
- 2. Threat or Perception
 - a. Determining Motives of Cyber Terrorism
 - b. Building Resilience as Pre-emptive
 - c. Protecting Networks against Innovations
 - d. How others have done it?
 - e. The Legal Framework
 - f. India's Readiness
- 3. Protecting Against a Cyber War
 - a. Detection and Response
 - b. Surveillance in networked systems
 - c. Cyber Deterrence
 - d. Vulnerability Management
 - e. Regulatory Framework
 - f. Doctrine of prevention
 - g. Doctrine of risk management
 - h. Doctrine of deterrence through accountability
- 4. Critical Information Infrastructure
 - a. National Security and Privacy
 - b. Data Protection
 - c. Freedom of Expression
 - d. Creating Standards
 - e. Education and Awareness
 - f. Strengthening Institutions and Capacity Building
- 5. Contours of Cyber Security Doctrine
 - a. Policy: National, Corporate, Individual
 - b. Technology: AI, Blockchain, IoT
 - c. Diplomacy and Points of Multilateral Negotiations
 - d. Coordination Structure for Cyber and Information Warfare
 - e. Patching vs isolation
 - f. AI based automatic response systems
- 6. Recommendations



Encl 2: National Release announcing the Task Force





1st Communication: Introductory Letter, February 2019

Dear

Patriotism can be gut-wrenching!

You want to do something for the country, but don't know how to?

India is being bled through a million cuts. Not all of them are physical. Our cybersecurity is constantly under attack from within the country and outside. As we move on to digitise everything, conventional armies will be replaced by cyber armies and criminals will become cybercriminals.

This got me thinking on the level of preparedness of India as a country against cybercrime, cyber monopolies and the threat of a potential cyber war. I spoke to the industry, the associations, the government, the think-tanks, social networks etc. to put together a database of people who can meaningfully contribute.

You will be shocked to know that there are less than 1,000 Indians with the requisite skill sets to even comprehend what is required to be done.

Through my research, your name came up as one of those 1,000 Indians, who have both the skill and the ability to contribute; which is less than .0001% of our population.

The question to you then is, would you?

I invite you to participate in a great national security initiative. We have set up a discussion group on cybersecurity with the following objectives:

- Identify the contours of Indian cybersecurity through the following views:
 - o Policy, e.g., national, corporate, individual etc.
 - Verticals, e.g., financial services, homeland security etc.
 - o Technology, e.g., AI, Blockchain, IoT
 - O Diplomacy and points of multilateral negotiations, e.g., data localisation
- Having identified and detailed the above document and evolve a coherent, implementable strategy. That can be published as a blue book and periodically updated.

The initiative is being driven by SKOCH DEVELOPMENT FOUNDATION, a not-for-profit company. The details of our Distinguished Fellows & Advisory Board are as follows:

- Dr N C Saxena, Distinguished Fellow, SKOCH Development Foundation & Former Secretary, Planning Commission, Government of India
- Dr M Ramachandran, Distinguished Fellow, SKOCH Development Foundation & Former Secretary, Urban Development, Government of India
- Dr Zohra Chatterji, Distinguished Fellow, SKOCH Development Foundation & Former Secretary, Textiles, Government of India
- Dr Aruna Sharma, Distinguished Fellow, SKOCH Development Foundation, Development Economist & Former Secretary, Steel, Government of India



- Prof Charan Singh, Distinguished Fellow, SKOCH Development Foundation & Non-Executive Chairman, Punjab and Sind Bank
- Mr Kishore Sansi, Distinguished Fellow, SKOCH Development Foundation & Former MD & CEO, Vijaya Bank
- Dr Deepali Pant Joshi, Distinguished Fellow, SKOCH Development Foundation & Former Executive Director. Reserve Bank of India
- Mr Bhaskar Pramanik, Distinguished Fellow, SKOCH Development Foundation & Former Chairman, Microsoft India
- Mr Nirmal Bansal, Senior Fellow, SKOCH Development Foundation & Former Banker
- Prof V N Alok, Senior Fellow, SKOCH Development Foundation & Associate Professor, Indian Institute of Public Administration
- Dr K G Karmakar, Senior Fellow, SKOCH Development Foundation & Former Managing Director, NABARD
- Prof Deepak B Phatak, Director, SKOCH Development Foundation & Professor Emeritus, IIT Bombay

A few of the initial members of the Cyber Security Discussion Group are:

- Mr Sivarama Krishnan, Leader, Cyber Security, PricewaterhouseCoopers Pvt Ltd
- Mr Ankush Chowdhary, Principal Security Advisor, Asia Pacific Japan, Amazon Web Services
- Mr Akhilesh Tuteja, Partner, National Head Technology and BPM Sector, KPMG
- Mr Rahul Aggarwal, Partner, Cyber Security, PricewaterhouseCoopers Pvt Ltd
- Mr Gautam Pande, Director, Enterprise Security Solutions-South Asia, Mastercard
- Mr Jaspreet Singh, Partner Cyber Security, Africa, India & Middle East (AIM), Ernst & Young
- Mr C. Muralikrishna Kumar, Senior Adviser ICT, NITI Aayog, Gol
- Prof Deepak B Phatak, Director, SKOCH D evelopment Foundation & Professor Emeritus, IIT Bombay
- Mr Dinesh (Krishna) Pillai, Managing Director, Acquisory Risk Consulting Pvt. Ltd.
- Dr N Vijayaditya, Former Director General, NIC
- Ms Pratibha Jain, Partner, Nishith Desai Associates
- Prof Anjali Kaushik, Professor, Management Development Institute, Gurgaon

Given the time pressures on experts such as yourself, our attempt is to hold most of the discussions remotely through email, calls, online and so on. There may be smaller group discussions held at Delhi, Mumbai etc. to get some face time. Based on these, some of the members may wish to contribute papers and others to critique and make such inputs better. Yet others may contribute to the knowledge repository and share best practices.

As India celebrates the $73^{\rm rd}$ Independence Day, our efforts would come together as a national consultation on August 17, 2019, at Constitution Club of India, New Delhi entitled "Cyber Patriots Convention". It will be the biggest gathering of Indian cyber experts.

Based on the papers, discussions and the conference, the first "Indian Cyber Security Doctrine" would be published as a book.

The relevant stakeholders from the government, policymaking, civil society etc. would be engaged to make our work a meaningful and actionable input.



At this juncture, following questions may come to your mind:

- Q: What do I have to do?
- A: Be involved in consultations and discussions. Contribute through inputs or write-ups, if you so desire.
- *Q:* What is the nature of this involvement?
- A: The involvement is purely voluntary without any financial or legal liability.
- *Q:* How much time do I need to commit?
- A: Whatever can fit into your day-to-day schedule, while being patriotically justifiable. Leaving aside paper writing, this may amount to 4-5 man days spread over a one-year time period.
- Q: What is in it for me?
- A: Besides the great satisfaction of having served the country, this is a high visibility, high impact exercise where the members will receive national publicity and may even qualify for the prestigious SKOCH Cyber Patriot Award on the basis of the contributions made.

If you have any other questions, I would be happy to address those.

May I request you to kindly acknowledge receipt at <u>skoch@skoch.in</u>. I look forward to your kind acceptance to help include you to the Cyber Patriot discussion group.

Thanking you,

Yours sincerely,

Sameer Kochhar Chairman SKOCH Group +91 9811089604

Encl(s):

1. Book "ModiNomics: Inclusive Economics, Inclusive Governance" authored by Sameer Kochhar