High Confidence Medical Device Software and Systems Workshop: Role of the NITRD Program and the NCO/NITRD

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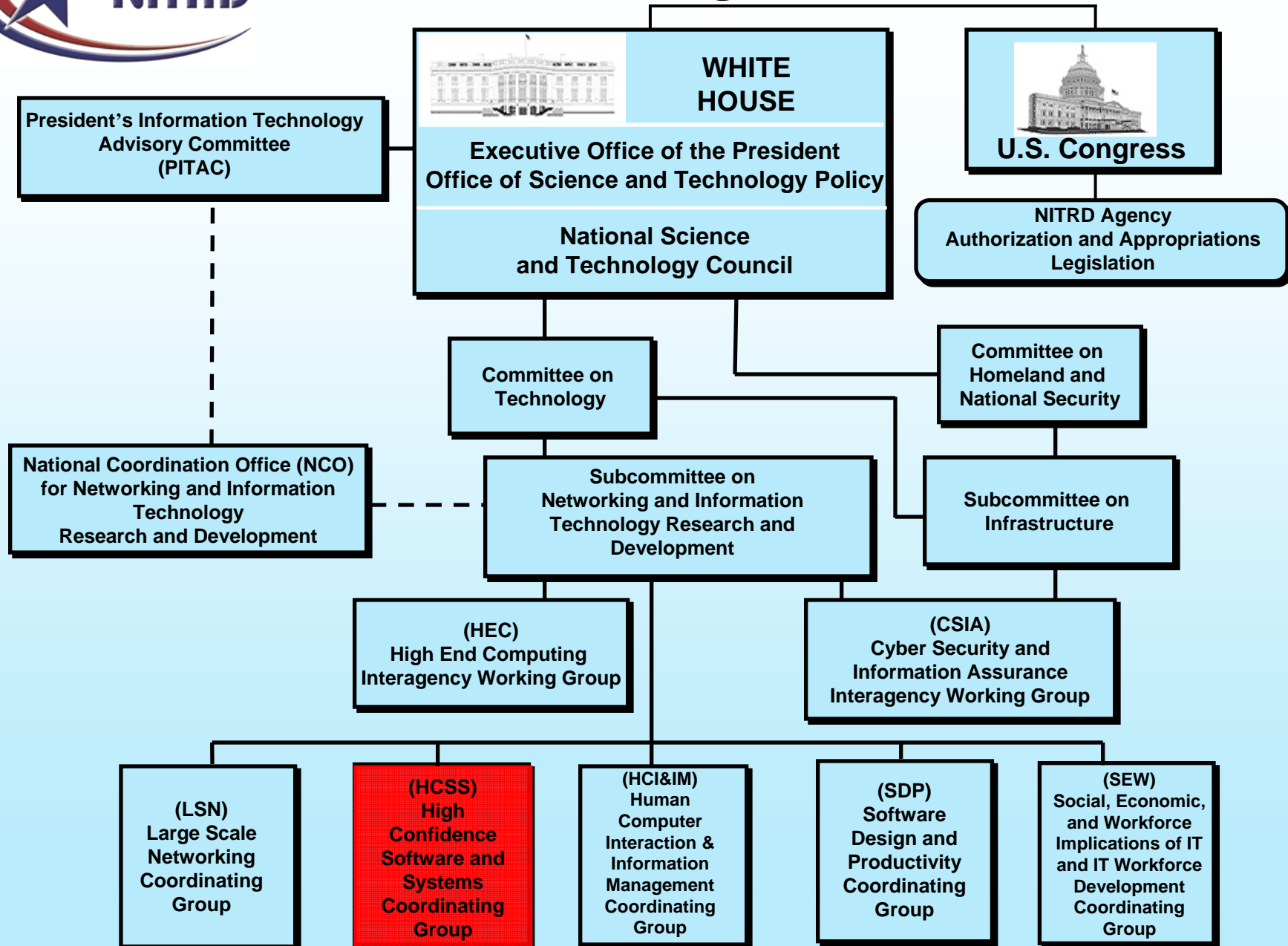
- **Authorization of the Networking and Information Technology Research and Development (NITRD) Program**
  - **High-Performance Computing Act of 1991**
  - **Next Generation Internet Research Act of 1998**
- **NITRD Subcommittee, National Science and Technology Council (NSTC)**
  - **Representatives from 12 program agencies + OMB + OSTP + NCO/NITRD**
  - **Has two Interagency Working Groups (IWGs) and five Coordinating Groups (CGs)**
- **Budget of $2.2 billion in FY 2006**

NITRD Program Coordination

NITRD

WHITE HOUSE

Executive Office of the President
Office of Science and Technology Policy

National Science and Technology Council

President's Information Technology Advisory Committee (PITAC)

U.S. Congress

NITRD Agency Authorization and Appropriations Legislation

National Coordination Office (NCO) for Networking and Information Technology Research and Development

Committee on Technology

Committee on Homeland and National Security

Subcommittee on Networking and Information Technology Research and Development

Subcommittee on Infrastructure

(HEC) High End Computing Interagency Working Group

(CSIA) Cyber Security and Information Assurance Interagency Working Group

(LSN) Large Scale Networking Coordinating Group

(HCSS) High Confidence Software and Systems Coordinating Group

(HCI&IM) Human Computer Interaction & Information Management Coordinating Group

(SDP) Software Design and Productivity Coordinating Group

(SEW) Social, Economic, and Workforce Implications of IT and IT Workforce Development Coordinating Group

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FY 2006 Budget Requests (dollars in millions)

Agency	HEC I&A	HEC R&D	HCI&IM	LSN	HCSS	SDP	SEW	Totals
NSF	201.8	105.0	168.5	94.5	76.0	65.4	92.1	803
NIH	135.1	67.3	171.0	76.6	12.3	26.4	12.0	501
DOE/SC	105.7	82.0		36.2			3.5	227
DARPA		81.0	74.4	20.8				176
NSA		36.9		1.5	62.2			101
NASA	34.0		14.5	13.0	12.8			74
AHRQ			38.0	30.0				68
NIST	5.4	0.6	8.6	4.6	18.0	4.8		42
OSD					2.5	20.0		22
NOAA	13.7	1.8	0.5	2.8				20
EPA	3.3		3.0					6
Subtotals	**499.0**	**374.6**	**478.5**	**280.0**	**183.8**	**118.1**	**107.6**	**2041**
DOE /NNSA	33.1	30.5		14.3		31.6	4.4	114
Totals	**532.1**	**405.1**	**478.5**	**294.3**	**183.8**	**149.7**	**112.0**	**2155**

Other participating agencies: AFRL, ARO, DHS, FAA, FDA, NARA, ONR

- To support **NITRD-related policy making in the White House Office of Science and Technology Policy (OSTP)**
- To serve as the Federal focal point for interagency technical planning, budget planning, and coordination for the Federal NITRD Program
- To serve as a source of timely, high-quality, technically accurate, in-depth information on accomplishments, new directions, and critical challenges relevant to the NITRD Program
- To augment the impact of information technology R&D as a transforming force for societal and economic good

- **The NCO helps the Interagency Working Groups and Coordinating Groups identify their research needs and then plan, budget, and assess progress in addressing those needs.**
- **The work of the NITRD Program and the NCO/NITRD is performed in the context of real, important, hard problems.**
  - **High confidence medical device software and systems typify such problems**
- **Programs and activities are implemented via interagency meetings, and workshops and conferences that involve academia and industry.**
- **The medium for informing our customers and the general public about NITRD activities is primarily through published reports including:**
  - **Annual Supplements to the President's Budget**
  - **Research Needs reports**
  - **http://www.nitrd.gov/pubs/**

- **Increased NITRD interagency R&D coordination and planning activities**

- **Increased conferences, workshops, and meetings that aid in identifying NITRD needs in strategic areas that are aligned with and benefit national priorities**

- **Increased NITRD agency interaction and outreach with non-governmental experts to help identify and implement NITRD Program priorities**

- The HCMDSS workshop is an excellent example of valuable NITRD coordination at work.

- The workshop will expose the NITRD challenges that underlie one of our Nation's important health care problems – the safety and reliability of medical devices.

- Unresolved, these challenges will have severe implications on the quality of the future of health care of our Nation's citizenry.

- This workshop clearly recognizes that IT advances in the design, reliability, and safety of medical devices enhance existing applications and enable new ones that ultimately yield the larger impact of saving the lives of those that depend on them.

- **The Government cannot solve these problems alone. Continuous outreach to experts in academia and industry is critical for stimulating and galvanizing current and future generations of researchers to solve IT hard problems affecting medical devices. That's why we're all here today.**

Questions?

- Visit http://www.nitrd.gov/
- Send e-mail to nco@nitrd.gov
- Call us at (703) 292-4873