UNOS Information Technology Advisory Committee

Chair
Bob Merion, MD

June 24, 2013

IT Advisory Committee Observations

- As available resources have not been sufficient to complete all projects, UNOS IT has been prioritizing its own work

- Emphasis on Chrysalis has delayed implementation of board-approved actions

- BOD must assume responsibility for prioritizing IT work, identifying resources, and communicating with transplant community

- UNOS IT could benefit from hiring specialized software development experience

IT Advisory Committee Observations

- Enormous mismatch between available IT programming resources and accumulated requirements

- Hardware infrastructure needs cannot be maintained for the long run at the current funding level

- UNOS IT has been prioritizing available resources among maintenance, incremental change, and transformative change

Funding Challenges

- Funding in fiscal year 2012 was 1.4 M in Capital and 16.5 M in Operating Expenses

- Funding barely covers the basic requirements of maintaining the existing system

  - Capital

  - Hardware & software maintenance costs

  - Maintenance Support

  - Regulatory & Contract Requirements

Recommendations

Staffing Recommendations

Approach new product development as a distinct skill set

- Hire a director with commercial software development experience
- Create a separate department within UNOS IT for new software delivery
- End the practice of using new software developers and maintenance developers interchangeably

UNOS IT is already working to implement these recommendations.

Staffing recommendations

Phase 1

- 17 IT positions will be posted
- Recruiters will be notified of openings
- Target is to hire 77% by October 1, 2013
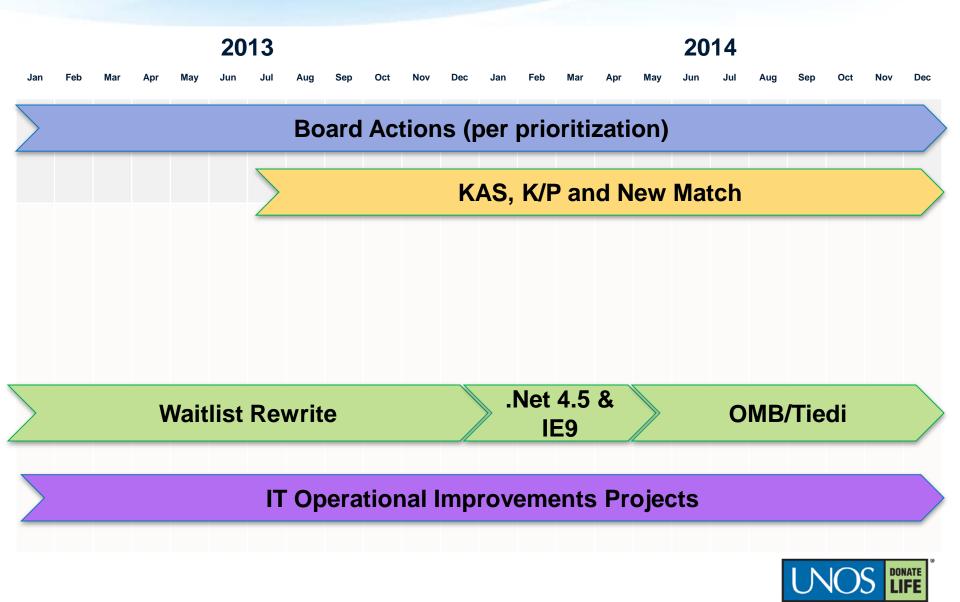- Remaining 23 % hired by November 1, 2013

Phase 2

- 11 IT Positions will be posted
- Recruiter will be notified of openings
- Target is to hire 55% by November 1, 2013
- Remaining 45% hired by January 1, 2014

Phase 3
- 13 IT Positions will be posted
- Recruiters will be notified of openings
- Target is to hire 46% by January 14, 2014
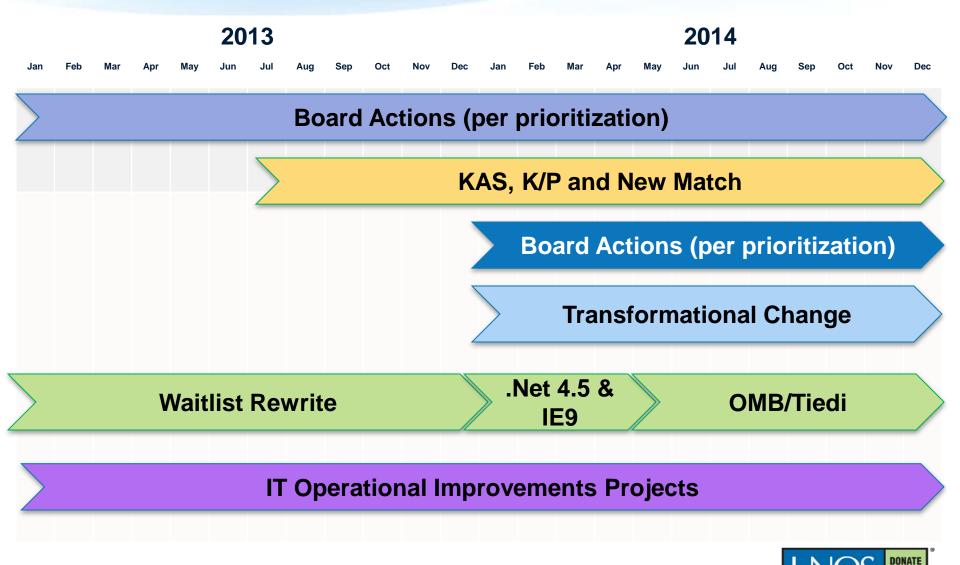- Remaining 54% hired by March 1, 2014

Future Capacity – Project Teams

Future Capacity – Project Teams

Governance Recommendations

Current process when committees decide to develop a project:

▪Committee develops a one-page description of the problem and potential approaches

▪UNOS IT develops a high level estimate based on the type of project, characterizing each proposal as one of four "t-shirt sizes"

▪Policy Oversight Committee (POC), a committee made up of the vice-chairs of the other standing committees, reviews proposed projects and suggests a priority ranking

▪Executive Committee considers total available staff (non-IT) hours and approves or disapproves each proposed project

 NEW STEP:

▪*Committees now include a projected completion date for policy development. POC should assemble and track a projected IT burden for future years.*

Governance Recommendations

Current process when Board of Directors decides whether to approve a proposal:

▪Proposed policy change, public comments, and mid-level IT estimate presented to Board. IT estimate is based on the proposed policy language, but not on thorough programming requirements

▪Board approves or disapproves each policy proposal

NEW STEPS:

▪*Business Analysts should participate in committee meetings to help committees understand the size of their proposals while in development, and help explore less expensive alternatives*

▪*Proposals will be presented to the Board with complete business requirements, to ensure the most accurate possible estimates at the time of the policy approval*

▪*After discussing all policy proposals, Board should consider the cumulative IT cost of all policies approved at each meeting*

▪*Staff should present IT estimates to Board in terms of the effect on the registration fee*

Governance Recommendations

Current process when Executive Committee determines programming order

▪One month after each Board meeting, the Executive Committee considers the place in which each newly approved project should fit in the queue

▪IT staff recommends whether there are projects that could be combined, or projects that should occur in a particular order for greater efficiency

▪IT staff provide the best available estimate for each project, even though at present some have full business requirements and others do not

NEW STEPS:

▪*Requirement that all projects have fully developed requirements before presentation to the Board will also ensure that all projects being placed in the queue have solid cost estimates*

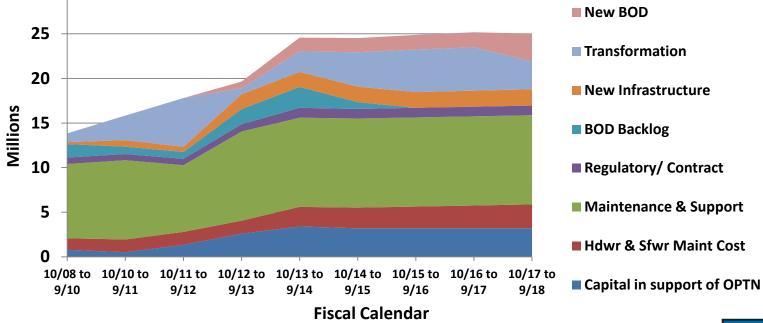▪*Board should establish an goal for implementation time for IT programming projects*

▪*Programming queue should be continually updated to provide estimates for completion of all Board-approved policies. Projected programming calendar should include a comparison to the Board-established goal for implementation time.*

FY 2010 – FY 2018

5/6/2013

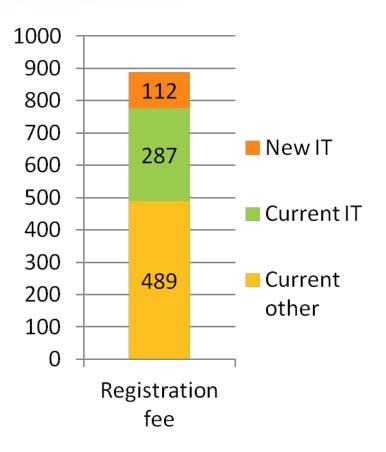| Period	Capital in support of OPTN	Hdwr & Sfwr Maint Cost	Maintenance & Support	Regulatory/ Contract	BOD Backlog	New Infrastructure	Transformation	New BOD	Total Expenses (Cap & Ops)
10/08 to 9/10	0.786	1.294	8.33	0.72	1.51	0.22	0.97		13.83
10/10 to 9/11	0.521	1.423	8.89	0.69	0.82	0.74	2.75		15.83
10/11 to 9/12	1.34	1.451	7.48	0.72	0.77	0.57	5.47		17.81
10/12 to 9/13	2.6	1.451	10	0.82	1.69	1.66	0.69	0.74	19.66
10/13 to 9/14	3.4	2.2	10	1.11	2.34	1.69	2.3	1.54	24.58
10/14 to 9/15	3.2	2.31	10	1.07	0.76	1.73	3.87	1.59	24.53
10/15 to 9/16	3.2	2.43	10	1.08		1.76	4.77	1.64	24.88
10/16 to 9/17	3.2	2.55	10	1.08		1.8	4.86	1.69	25.18
10/17 to 9/18	3.2	2.68	10	1.08		1.83	3.12	3.12	25.03

Finance Recommendations

In order to implement the recommended staffing and provide sufficient capital investment, the ITAC recommends an IT budget of $24.58 million, as detailed on the previous slide.

That amount will require an OPTN fee increase of $95 per registration, and a UNOS fee increase of $17 per registration.

Stacked bar chart titled "Registration fee" with y-axis from 0 to 1000. New IT: 112, Current IT: 287, Current other: 489.

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June 25, 2013

Potential Project Plan – Fiscal 2014

	2013												2014										
	2Q			3Q			4Q			1Q			2Q			3Q			4Q			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct

BOD Backlog
- BOD: LAS
- BOD: KPD
- BOD: Clairify 2A & A2B
- BOD: Req. Deceased Donor Typing by DN
- BOD: Mod Patient Safety

BOD New Work -2
- BOD: KAS - KI/PA Wait Time
- BOD: KAS

BOD Backlog -3
- BOD: Mod Liver
- BOD: Update CPRA, etc.
- BOD: Consent to Authorization
- BOD: Improve Vessel
- BOD: Ped Liver Remove ICU Req & Mod Ped Liver Hepat.
- BOD: Require Report Non Utilized Livin
- BOD: Liver HCC Imaging
- BOD: Hemodynamic Data BOD: Re-instate No Appea
- BOD: Require Report Non Utilized Living
- BOD

Transformational Change
- DomorNet Enhancements

Maintenance Projects
- US: Waitlist Re-write
- US: Waitlist .Net 4.5/ IE9 support for Unet
- BOD: OMB Changes

IT Operations Projects & Security/Compliance
- US: Windows 7 deployment
- US: SQL Upgrade & Cube Rebuild
- US: Lync Implementation
- US: SharePoint Upgrade Planning
- US: SharePoint Upgrade
- US: POAMs - System and App Security Remediation
- US: Service Desk Strategy
- US: S
- US: Network Target Architecture & Design
- OEI: Network Refresh