

PPBE Reform - How Does Money Impact Tech Transition

[00:00:37] **Eric Lofgren:** thanks everyone for joining and we're gonna get started. Unfortunately, Ellen Lorde, our other panelist she had a flight delay and so there's a lot of fog at DCA, so she'll be here probably at the last few minutes. But it was an act of fog. So what can we do? But before we get to our great guest, Mike, I'm first obliged here to mention that we had two reports at the George Mason Center for Government Contracting recently on the planning, programming, budgeting execution system.

[00:01:03] It's a mouthful. P B B E. When you hear me say that, that's what we're talking about. But the first paper was really on pathways to the defense budget reform. And I took a look at the historical context and how the Department of Defense was run in just a radically different way in the fifties and before.

[00:01:18] And then I tried to trace that evolution of the structure of the budget and how we got to where we are today. The other paper, it's a more recent paper, it's a execution, flexibility and bridging the Valley of Death. That one's more about recommendations for the near term and translating some of those lessons into what we can do.

[00:01:34] And the tagline, I think there was we don't need new laws to get this done. It's mostly can the department at every level and Congress really agree on what needs to be. Okay, that's enough of that. We're really here to hear from two leaders, one of which is with us so luckily we have Mike Brown with us. He's a partner at Shield Capital now, and he's also a visiting scholar at the Hoover Institute at Stanford. Just recently before that he was the Director of Defense Innovation Unit and he's had a long career in the commercial industry, including CEO of Symantec and many other things before that as well.

[00:02:09] Presidential Management Fellow as well. So Mike has a lot of experience and a lot of great views on this topic, so I'm really happy to have them. Thanks, Eric. Glad to be here. So the first one I wanna get to is, Congress has really started looking at this recently, and last year they had some kind of like closed door meetings and sessions about P B B E.

[00:02:28] So we don't really know what they said, but Jack Reed, Senator Jack Reed, he came out and he said something to the effect of, wow, P B B E, this is the most boring process I've ever heard, but it's incredibly important. And so it has a real impact on, for structure and war fighter capability.

[00:02:45] So how would you pitch this or how would you explain why this topic is actually

[00:02:50] **Mike Brown:** important? Yeah, it's critically important because all of us who've been in leadership positions know what happens in an organization follows the budget. You can't get anything done at the Pentagon or any other organization if you don't have manpower and dollars behind it.

[00:03:04] You can have the best national defense strategy, all the best intentions if you're not following that up with. The dollars, then the execution is not gonna follow that strategy. Maybe boring to talk about, but there's probably nothing more important to driving modernization of the force than making sure P B and E allocates the right dollars to the right priorities within d o D unfortunately, because of a lot of history and PPP and E goes all the way back to Secretary McNamara we've got a process that assumes we understand the future, that we can even predict the future.

[00:03:34] Maybe that was the way Ford Motor Company thought about its production in the 1950s that is pretty predictable how many cars we're gonna sell per year. We're in a vastly different world now, aren't we? I don't think anyone at the Defense Department or anywhere else would say we could predict the future.

[00:03:49] Ukraine blew a hole in that if you thought you could. So we have to react now to events around the world that can't be forecast, and we've got to be more agile. The last defense strategy called for that leave it up to you, how well we're doing on becoming Agile as an organization. A lot of room to go, but we really need to have a budgeting process that takes account of some flexibility to adapt to new things in the world that we couldn't have forecast.

[00:04:15] And that also speaks to the priorities could change quickly. So a process that takes three years to program a dollar of spending, that's what we're living with now when you add on continuing resolution and very little flexibility because Congress allocates to 10,000 line items that does not produce an agile organization.

[00:04:35] So I think it's how long we take to do the budgeting process and the fact that there's very little flexibility that creates some problems for us. You brought up the

[00:04:42] **Eric Lofgren:** National Defense Strategy and was just taking a look. The 2022 National Defense Strategy just came out, I don't know if you guys had a chance to see it, but there was a key phrase in there, which was a fast follower strategy.

[00:04:55] The department must take. In order to adopt technologies like a i l and networking and in a slew of other things. And I believe, that term fast follower really came from you. And so it's cool that it's now in the part or in the National Defense Strategy. But can you talk about, maybe the term wasn't from you, but the way that it's been adopted by the Department of Defense, you really led that charge.

[00:05:17] So can you talk a little bit about what does this term mean, where to come from and how does it relate to what we're talking about

[00:05:22] **Mike Brown:** here? Yeah, I certainly didn't coin the term. This is from industry. In my experiences being a tech executive for so many years, a lot of companies in the tech world are trying to be first to market.

[00:05:33] And if you're not first to market, you wanna be a fast follower. That's where it comes from. Because why would you wanna be late with new technology? Unfortunately, this is a position the Department of Defense finds itself in. Why is that? If you go back, 60 years or so, The Department of Defense was developing along with prime contractors, a lot of the technology it needed and was reaching out to industry if it needed to.

[00:05:56] This is where Silicon Valley gets its name. The Defense Department created Silicon Valley cuz it needed miniaturized electronics at the time to miniaturize nuclear weapons. And also the space program was of course a big consumer early micro electronics. Fast forward to today, we're in a different world where my previous boss, Heidi Shoe came out with 14 technologies to said, important to national security.

[00:06:18] You'd recognize those ai, cyber autonomy, advanced computing communications, those are not being developed by the Defense department. They're being developed by commercial industry. So in that 60 years, the world has changed from one where D O D was at the center of r and d in 1960. D o D was responsible.

[00:06:39] One third of global r and d as just a phenomenal statistic. One third of what was happening in the world was happening at D O D today, that's 3% . So quantitatively it's changed. We know qualitatively it's changed. 80% of those technologies we need. Ones I just mentioned call four by Heidi Shoe. They're being developed by the commercial industry.

[00:06:59] What kind of process do we have at D O D to reflect that change in the world? Unfortunately, those of us who've worked in the system know that far too much of the process is still being driven by the things that we are developing with prime, like an aircraft carrier or the F 35. So we're not adapting to fast follow the technologies that are being developed in the commercial world.

[00:07:19] So that's really the origin of fast follower and I was delighted to see that. There's some recognition in the department. For commercial technology, not for directed energy and hypersonics for commercial technology, again, that's 80% of what we need. We need a different system and it's got to fast follow what's happening in the commercial world.

[00:07:38] And we can talk about what that means if you want. Please. Okay. . Oh, that was easy. It's really so easy when you're the only panelist, isn't it? , really it's what would we need to change about a system that's based on programs of record? Programs of record. What is that? That's, we take time to develop requirements.

[00:07:57] We're gonna tell the market what we want to to have built. Okay, F 35, it's a brand new fighter. Aircraft doesn't exist in the commercial world. We need to provide input to the market on what we need. We take too long in that F 35 took 20 years. So back to predicting the future. How could you possibly think you're gonna predict what you need 20 years from now?

[00:08:16] If you told Silicon Valley you were doing that, they'd say, you're nuts. You're, there's no way you're gonna get that right. You're not gonna get anything better. Those last 18 years of requirements, , spend some time up front and learn to iterate. You gotta be agile, you've got to build something and then iterate on it.

[00:08:32] The way the US developed aircraft in the 1950s followed that model, very quick succession of different models that we would build. And again, McNamara changed that probably for good reasons in 1960, but ones that don't hold up now that we're in the 2020s, so program of record after the

requirements, then we're gonna go through a competitive process, choose one vendor.

[00:08:53] The requirements don't change, then they're locked in stone or in concrete. And now we're gonna award to one vendor the ability to produce that. And we might be buying it for 40 or 50 years. We could spend another session on how that should change. We need to have a much more open, competitive system rather than that for a perm record, but for commercial items that we want to buy.

[00:09:15] That makes no sense whatsoever. So good news, we don't need requirements, so we should validate the need and we don't need to tell the commercial market what to build. AI software, small drones digital wearables like I'm wearing. We don't need to tell the market what to build, so we immediately save time.

[00:09:32] We don't need to go through a process. We're gonna select for 40 years. What we need is a fast assessment process so that we can refresh the technology at the rate the commercial market produce. So that's a different range of motion. I call that capability of record, meaning we know we're gonna need the capability.

[00:09:50] You're gonna need small drones, AI software, cyber tools. It's not in question. You're gonna need that for the foreseeable future. So now we need the flexibility from Congress to allocate money for the capability, not a single vendor in requirement, but capability. And then the department has to decide who's going to lead in that effort.

[00:10:10] Meaning one organization needs to take responsibility for assessing and refreshing that technology. Commercial technology is very different from ships. Ships we know are going for the Navy. It's pretty clear who should take responsibility. The Army, the Marines, they're not, or I'm sorry, the Army and the Air Force aren't saying, okay, we need to be in the process for deciding who's the best ship builder.

[00:10:31] But if you're talking about AI software or small drones they apply to all the services and they all need them. It does not make sense to divide that up and have every service doing their own thing. We should name one executive agent, one lead organization that's gonna say, and it doesn't be the same for all commercial technologies, but one for small drones, one for digital wearables.

[00:10:50] Be helpful to have one or two for software so that organization could then take the responsibility for, with that allocated budget from Congress, a dedicated budget that keeps coming. We're not gonna allocate that to one vendor. We're gonna say, let's see what's in the best best in the marketplace today.

[00:11:06] Re compete that at a rate that's consistent with how fast the commercial market gives you upgrades for small drones, that's probably every 18 months. So that's the idea behind what you'd have to do to implement a fast follower strategy. It's all about introducing more competition in the marketplace and delivering to the force the most current technology.

[00:11:27] So I think we'd have a much better force, better value for taxpayers. And certainly give the war fighter better tools if we adopted that. Something that we could do for the commercial market that you can't do with things that are purely military. So

[00:11:39] **Eric Lofgren:** I wanna drill in and see how the budget actually affects this this capability of record and fast follower idea.

[00:11:46] And so is the vision here, really, you have this capability of record. It basically has one funding line, therefore you can do multiple programs that each would've been their own stovepipe and you couldn't move money between 'em, so you're able to make those trade offs. Is that the idea really consolidate and allow for that flexibility at the lower levels?

[00:12:05] **Mike Brown:** It totally is. And this corresponds with some activity that's happening in a and s right now to go to more of a portfolio approach. This is what we had in our budget. If you go back to 1960s, I understand that there was one line item for tactical aircraft, so you didn't have. Congressional staffers telling the department, okay we're gonna have this much of this aircraft, this much of another.

[00:12:26] And of course then we have the unintended consequence of Congress telling the department here, you're gonna buy more eight tens and maybe you don't want anymore. So it really is giving the department a little more flexibility to make those trade offs. You know, You're gonna need the category tactical aircraft, but let's use what's the best available in the marketplace, what the defense department really thinks it needs, and get that fielded in the marketplace.

[00:12:49] I One of the issues with our budgeting process is the incredible granularity that we have. It's so complex when the budget comes over and it's those 10,000 light items, no one person in the defense department really can understand the entirety of the budget. It's the same with the N D A and 1000 sections.

[00:13:06] When I was leading diu after the NDAA gets passed, we had folks on staff and DIU's a very small organization at D O D. Going through combing that to look for the search to see what affects us. That's a crazy process. So rather than getting strategic direction from Congress, everyone knows these are the priorities that Congress is telling you.

[00:13:26] We're scanning the document of a thousand sections. We're looking through the budget of 10,000 line items, what affected us? Pretty tough to get a view of what the comprehensive whole, what is Congress telling us from that kind of process. So I think it's time to take a step up and not be working at that level of granularity.

[00:13:44] Allow for more of a portfolio approach, more tradeoffs to occur in the department. I think we'd be a lot better off with that system. And if you think about it, that borrows directly from how corporations do budgeting Exxon Mobile Google. You take whatever the most complex organization in the world is today that you want to pick on.

[00:14:01] Granted, DOD is bigger, but no one takes more than a year to do a budget. And you would not have the granularity coming from your board of directors to tell the ceo here's 10,000 lit items and don't you dare deviate. From that, if you see things changing in the world you operate in and you're trying to optimize, don't change anything.

[00:14:19] I

[00:14:20] **Eric Lofgren:** heard you say before that the department needs to kind of collapse. Its, Its timelines, right? Because there's a cycle time mismatch. It takes multiple years to get a budget. Industry and electronics and software is already onto the next thing. So you talked about Hey, can you get this down to one year?

[00:14:35] Does it make sense to target a metric of Hey, this just needs to be within a year or it's not working. Is does that make sense or is there other things

[00:14:44] **Mike Brown:** going on? I, I totally think it makes sense. I think if you were to say, what's the additional value we're receiving by that process, taking two and a half to three.

[00:14:52] I think it'd be pretty hard to argue that there's any more value in that. And frankly, if you set that as the goal and said, we will be done in a year, then people would have to adjust their process. The department would have to get its work done in half a year instead of a full year. Congress would have to do its job and get the hearings that they want to have in that second half of the year.

[00:15:11] And then you could pass the budget. The fact that Congress takes a full year from the time the president sends over the budget and then you've got continuing resolution. We all know that's dysfunctional. We're certainly not getting a benefit from that. In fact, there's been a lot of discussion from all levels of the department about how that wastes money because, uh, for those who are in the department, you already know.

[00:15:31] The problem with the continuing resolution, I get to spend it a fraction of last year's spending, and if I'm lucky enough to get an increase, you've pushed that into the six months we have left. On average, the budget gets passed in February, so it's six months late. I've got an increase. I gotta pack that all into six months because what if you haven't spent it?

[00:15:51] I'm gonna lose it. What kind of incentive is that? So that that just creates waste and inefficiency. I don't get to start on my new things until six months into the year now. I'm trying to spend more than I probably should. We know that's not in the right direction. I frankly like to see for the department simplification of the use it or lose it.

[00:16:09] We shouldn't have that as a maxim. We should think about what needs to be funded across multiple years. I know the appropriators don't like that. But when we've got to be scaling up munitions as an example, right now, doing things one year at a time makes no sense. And we need flexibility to adapt to whatever's happening around us, so that we can take advantage of new technologies or new opportunities and save the taxpayer dollars instead of these wasteful mechanisms, which user to lose.

[00:16:33] It does. Colors of money is another constraint that really creates a lot of difficulty. I didn't even want to tell you the amount of time I spent in a very small organization at D O D. Trying to figure out what can I use this money for, that money for? And all that creates a waste and and inefficiency, you know, as we talk about,

[00:16:51] **Eric Lofgren:** Giving some flexibility by using larger, program elements to delegate some of that flexibility.

[00:16:57] We've seen Congress recently push back a little bit on that, the senate appropriations report for 23. They said, let's hold off on some of these, open-ended innovation funds. What we need are detailed justified plans. And I think you're starting to see that not just across Congress, but even in some aspects of the Department of Defense too.

[00:17:16] You see the middle tier of acquisition, right? It's a different authority, but people are struggling to understand, how do I measure this? How do I predict and control this? Because if that might spin off into a different capability, what is the acquisition program baseline? The cost schedule, technical for the full life cycle.

[00:17:33] We love this full life cycle view. , what's your view on that kind of, do we still need a life cycle cost estimate before you start prototyping within this world of a capability of record?

[00:17:44] **Mike Brown:** There's a lot in that question, . No,

[00:17:47] **Eric Lofgren:** take your time. Yeah.

[00:17:48] **Mike Brown:** I think one, we do need flexibility for the reasons already described.

[00:17:52] Appropriators don't like that because they view that as open ended open ended it might be but it doesn't mean it's a lack of transparency. We could be reporting back in whatever timeframe Congress would like on how we're actually spending the money and come back and provide complete rationale for why we made the decisions we made.

[00:18:09] So I don't think transparency should be used. But you do need that flexibility for the reasons we talked about. Can't predict the future. I do empathize with Congress and the fact that the department's budget is complex and So if you look at the number of programs that exist there's the APFIT program that just was passed this past year.

[00:18:29] Heidi Shyu introduced the RDER program. And I've heard uh, appropri say, I'm confused by all of this. So I think we in the department need to do a better job of explaining how do all these relate to one another, and can we

do any work in simplifying that? If you think about it at one level one problem has created the other.

[00:18:45] The fact that we don't have flexibility means you have all these different programs that get created to try and create that flexibility, but you just get more granular buckets and it would be better. You. If the department had the flexibility, then we wouldn't have to create so many of these different programs to suit each niche and each opportunity that comes up and then provide a rationale.

[00:19:05] I do also think that it's time for the department to take a look at how much we are investing in discovery versus deployment. And making a grand entrance is Ellen Lord

[00:19:17] **Ellen Lord:** I see you. See you. Good to see you. I so apologize. American Airlines was not working with me this morning.

[00:19:25] **Mike Brown:** In fact, you have very little control over whether DCA lifts for fog, right?

[00:19:30] **Ellen Lord:** Absolutely. But I also love it when they change schedules on me. However, we are resilient. We can do this .

[00:19:36] **Mike Brown:** Welcome.

[00:19:36] We're talking a little bit about Budgeting at the department. And I was just talking about the fact that I think we would benefit by a review of how much of our resources the department are focused on long term development, discovery, science, and what can be deployed in the next two or three years.

[00:19:53] So at the department back to the time when we developed a lot of the technology we needed, we'll put together long term programs. I'm a big believer in that what DARPA does, what we do to develop major weapons programs, but on average that takes nine to 26 years to bring capability in the department.

[00:20:10] Okay, let's put that in one bucket. I think we're overinvested there and we're not spending nearly enough on what could be helping Indo Paycom in the next two or three years. If we were called to fight there, the president asked the department to defend Taiwan. You picked the scenario. There's not as much energy on what could we ramp quickly.

[00:20:30] So I think if we did that, we put. More balance into modernizing the force because there's things only we can do with the next generation fighter and Columbia class submarines. But there's a lot we can do. And Ukraine shows us this with small drones sensors in space, the SAR imagery that told us what was going on in Ukraine, to know Putin was a liar about invading Ukraine.

[00:20:52] And the intelligence community called that. There's so many things that are being developed commercially that could help us modernize a force, and there's not enough energy on making that happen in my view.

[00:21:03] **Ellen Lord:** Absolutely. I'm concerned we are putting so much money, US government money into research and development where the greatest portion of innovations being done in the commercial sector.

[00:21:17] And it's different than 50, 60 years ago. So we need to leverage that commercial capacity, bring it in very quickly. And then build capacity and capability within our industrial base. So I'd like to see more d o d money going into contracts and actually getting the production lines going because frankly, if there's a clear demand signal, Industry will respond to that, put their internal research and development invest capital in what we need when the demand signal is clear.

[00:21:54] But then d o d should be buying things basically, whether they be products or services. And we see that Ukraine has really been an inflection point for technology on the battlefield. And we see that quantity has quality all of its own. We talked about drones. When you have a thousand of them going out, that's almost a self-healing network right there.

[00:22:15] And we see what we can do with commercial satellite imagery. What we need to do in the government is stimulate those production lines to get going.

[00:22:25] **Eric Lofgren:** Yeah. It seems like there's been something of a prototyping fatigue potentially, right? The budget activity six four, the prototyping account really got beefed up in the 2016 to 18 timeframe, but there's.

[00:22:36] When we look historically right, the procurement to rd t and e ratio was like \$2.50 for every \$1 of rd, t and E, and now it's almost one to one,

[00:22:46] **Ellen Lord:** right? Which is crazy because what we do is we know it's a choice for companies. For industry, private industry to choose to do national security work.

[00:22:59] It's a choice to do it. Now, when they go and put their own dollars in to go and develop capability, demonstrate it, participate in exercises, often just with a crater or something like that's de minimus in terms of funding, then perhaps they get a couple sips. The question is, how do they maintain their workforce their facilities, if they're told just hang on 18 months or so, we'll get you a contract there.

[00:23:26] It doesn't work that way and that's why people deselect and unfortunately that's why. The only stability we have is in the large primes who we definitely need, but we know the innovation's not happening there and they're the ones that were structured around all this lumpiness and have these huge wrap rates so they can have these standing, armies in the background that doesn't work for small companies that are trying to make payroll and, have investors who wanna see a return on that investment.

[00:23:58] So we need to flip it around a little bit and start handing out contracts. Yeah. For production,

[00:24:05] **Mike Brown:** I think what Ellen's referring to is this big mismatch between the government timeframes and what in a venture back startup, which is all about time and cash. And it's dod, we don't have that kind of constraint, so it may not be as sensitive to it, but if we want to be working with those companies, and again, they have those 11 of the 14 technologies that we need, the ai, the cyber tools, the autonomy, Then we have to adapt and be attractive to those companies based on the incentives they have from their venture investors.

[00:24:34] **Ellen Lord:** Absolutely. And I think it can be encapsulated in the fact that the pace of innovation is far out stripping the pace of business practices within D O D. And the challenge and opportunity here is that I don't believe it's Congress really holding d o D up at this point. There's a whole question about transparency and accountability that we can get into with the P P B E cycle and so forth.

[00:25:03] However, the authorities are there. They've been translated into policy and implementation guidance, but it takes managerial courage and leadership to put those into play. And right now, I believe we're not seeing the leadership we need to really utilize those authorities and we're not training the acquisition workforce on the art of the possible.

[00:25:28] And over time, because we tend to publicize our failures, instead of failing fast and moving on, we really make A large production outta failures. So our acquisition workforce is incredibly risk averse. There is no reward for really leaning forward and taking risks. So we only do it in small areas.

[00:25:55] At d i we could do it at socom, they could do it. How do you scale that and get it to the scale d o d needs? Yeah,

[00:26:03] **Eric Lofgren:** some of that. I think that what you're just talking about gets right down to execution flexibility. And I think, Ellen, your time at atn l you've done a, you did a great job of delegating.

[00:26:14] Right. A lot of the major defense programs were delegated down to services, the smaller programs down to the ps. And I think what we're trying to say here is there something similar that needs to happen in terms of funding and flexibility such that delegation allows them to move at speed and make the trade offs in the year of execution?

[00:26:31] Can you talk a little bit about

[00:26:32] **Ellen Lord:** that? Absolutely. So reprogramming thresholds have not changed in the last 10 years. A lot of other things, such as inflation have changed dramatically in the last 10 years. So that flexibility is difficult when you have one year money, just even for mill pers and you're trying to PCs people and they can't get moved in the year they need.

[00:26:55] It's, it's a problem. So it's not only in R D T and E and procurement in on M but it's in a lot of these other accounts. So what there's a lot of discussion about, and this is part of what the planning, programming, budgeting and execution, or P P B E commission that I'm on, is looking at and doing listening tours to try to understand the art of the possible.

[00:27:21] The challenge is you have a dynamic here between flexibility and agility on the part of D O D and Congress taking their role very seriously as they should in terms of transparency and accountability. And so, P B E is where all these grand strategic visions come clashing into reality of what can you make happen.

[00:27:46] that, that's a challenge. But where there is. A lot of momentum right now I would say, is talking to Congress about opening up some of those thresholds. But however, in the building, in D O D, having leadership delegate

and allow PMs to do a lot more and not wait for, five reviews at different levels coming up.

[00:28:12] So there is in my. A large hidden factory in the department. Just through all the review cycles, everyone thinks that the rapid capabilities offices have all these special authorities. They have zero special authorities. Some of the most motivated, talented individuals that are totally committed to the mission go to the RCOs and then they get access to leadership to quickly have decisions made.

[00:28:43] The challenge is how do you scale that? And in order to scale that, you're going to have to delegate more, which means risk taking. However, I'm not sure we really have a choice here. I think we have to.

[00:28:55] **Eric Lofgren:** Mike did you have anything on that? One of the questions here was, in a previous panel we talked about a lack of trust in our employees.

[00:29:02] The not giving them the tools, giving 'em a sense of purpose and then empowering 'em to go, actually execute and make us like surprise and proud. Can you talk a little bit about that feeling? Or like how do,

[00:29:13] **Mike Brown:** how does the workforce feel about this? Yeah. I think one of the underappreciated underappreciate assets that we have is people incredibly talented, dedicated people.

[00:29:22] I That I had my own biased view before I came into government cuz I spent my whole life in the private sector. And I'm happy to tell you that a lot of those preconceptions were shattered with the talent that we have. People wanna do the right thing, they wanna drive change, they wanna support the mission, but they're hamstrung by rules have been in place for a long time.

[00:29:41] Things like colors of money use it or lose it that we talked about before. And Ellen's right. Leadership that was willing to lean forward and have us take some risk. I remember hearing John Hyon talk when he was vice chairman, that when he started in his career, he was able to work on, I don't remember what he was talking about, something in the Air Force.

[00:29:58] Big program when he was a major and had responsibility for tens of millions of dollars, he said that would never happen today. He was given that opportunity to make some mistakes and drive some impact. So we've become

more risk averse over time. Some of that's because Congress is exercising oversight and people don't want to get into trouble.

[00:30:15] Some of it is we don't have the incentives in place. If I'm a young major and I had responsibility for a program what incentives do I get? There's an incentive to keep the status quo cuz I'm not gonna get my head chopped off. But it'd be great if we were able to think about what incentives I might have in a program office to go look at a commercial capability.

[00:30:34] It might save us money, if that major saves the taxpayer dollars, there's no real incentive. I get a pat on the back. But that group he's working with doesn't get to keep any of that money in the private sector. If I went as a VP of marketing to the CEO and said, okay, I'm gonna save.

[00:30:50] 10 or 20 million. I might get to keep some of that to redeploy that and make my marketing department more effective. We don't have anything like that. I'd be interested to get Ellen's perspective on this, but the incentives that would motivate people to take a little more risk and save money maybe bring better capability, how does that accrue to the organization I'm working for?

[00:31:09] Those kind of incentives would drive the behavior cuz the talent is there.

[00:31:13] **Ellen Lord:** Yeah, I think it's a challenge and I think, luckily the majority of the individuals that serve in government. Are incredibly invested in the mission and where they want to make a fair salary and get compensated so their families can have, a nice quality of life.

[00:31:31] It's not as much about how much bonus money they're taking home at the end of the year, right? I think it's a feeling of accomplishment that they could see what they have done, what their efforts have led to in terms of fielding something down range, because that's what it's all about. What are our gaps in terms of war?

[00:31:52] War fighting, and what can we do to widen the overmatch we have against our strategic adversaries? But I also think that the department and Congress could do a whole lot more in terms of recognizing those who actually are excelling, who are showing the managerial courage, who are showing the leadership, who are taking smart risks.

[00:32:17] Right now, there's no incentive to take risk. And I think we need to call that out. We always, talk to staffers on the hill. Why don't you have a panel,

a hearing on all these great things that happen? The reality is there are only so many hearings you can have in a certain amount of time, and there are a whole lot of really huge issues you have to do.

[00:32:35] So I think, again, a lot of this is a leadership issue. The whole system is constrained in terms of not really moving at the speed of relevance to make decisions all along the way, and our systems are all gauged towards a very complex procurement. All the way from the planning and the programming and the budgeting to the actual execution and the procurements for very large systems.

[00:33:04] So there's a reason to go through a large requirements process when you have a multi-billion dollar procurement and it's going to take many years to build, and it will be around for 20, 30, 40 years and so forth. That's not the same for software, that's not the same for little systems and our system.

[00:33:26] Our overall, I think D O D system has not fundamentally ingested the fact that our systems now are really hardware enabled, yet software defined and frankly, hardware is becoming much more of a commodity. It's going to be around for a long time, and that software needs to be refreshed on a very quick basis because we have the capability to do it.

[00:33:53] If you're doing software correctly, you're developing, producing, and sustaining all in one quick cycle. Yet we have very few ways to quickly buy software like that. Although there are Pathfinder projects with colorless money as it's called BA eight, but what I'm concerned about is, I'm not sure that D O D is totally embracing the opportunity to use and exercise those Pathfinder projects and to talk about them to the Hill in terms of what they've done.

[00:34:28] So without that feedback, it's gonna be hard. So this hidden factory inside of D O D, I think needs to become a little bit more transparent and there needs to be more communication between D O D and the Hill because there's a huge lack of trust, but none of that can happen until you delegate down because physics are just against everything bubbling up with so much oversight and review, especially when it's paper crawling around desks versus being done digital.

[00:34:59] So

[00:34:59] **Eric Lofgren:** I, I'll give a couple stats here. For FY 22, the R D T and E program elements, half of them, so over 500 about, were under 30000025% were under 10 million. Procurement looks very much the same.

Again, these are programmed for multiple years out. Despite this specificity, DOD only manage 3% total reprogramming in FY 20 for RDT E.

[00:35:22] So that's above threshold reprogramming plus below threshold reprogramming. And again, that's so you, we've tightly specified and then there's not a lot of flex on the back end to do anything with it. Any reaction is just to that.

[00:35:35] **Ellen Lord:** I think it shows that the system is broken. , frankly, and reprogramming, let's be honest about it, with the wall and everything.

[00:35:44] Has gotten incredibly difficult because it's become so highly politicized. So I think we need to look at a system that treats those small procurements very differently. Congress has to understand the data behind what we're saying right here, and then the building has to figure out how to responsibly delegate that authority and frankly manage it through the data.

[00:36:09] Do what industry does? You roll up the numbers every week. If you are a program manager and you see who's charging what and what's come in, then monthly you do a deep dive into it and you live by those numbers. Unfortunately, right now we have so many federated systems in D O D that it's very hard to get meaningful numbers in terms of on a monthly basis, budget, actual deltas and so forth.

[00:36:37] So I think we need to go to a much more data driven system. With a lot more delegation.

[00:36:43] **Mike Brown:** So no, no surprise. I agree with Ellen on this point it's interesting. What would you conclude from the data that you just shared? Would you conclude that there's not really a need for reprogramming from that? Cuz nothing could be further from the truth.

[00:36:55] What I see from my time in the department is the culture is you will not go forward with any reprogramming requests. Kind of what Ellen said a minute ago, it's become so political. Something would have to rise to an incredible threshold to be worth the amount of effort to reprogram. So d IU you'd imagine we're seeing change in priorities and new opportunities for technology all the time.

[00:37:16] We've been a huge consumer of reprogram or a big user of that system. We never, in the six years I was at d IU, went through the reprogramming route cuz it's so labor. And it's

[00:37:29] **Ellen Lord:** discouraged, doesn't move at a relevant pace. So the key is one, the thresholds are so low they haven't gone up in the last 10 years, so you don't have that much movement.

[00:37:39] So you can debate endlessly over what should get reprogrammed and what shouldn't, but we need more flexibility in the year of execution. And that gets to the concept of, gee, instead of having so many discreet PEs, could you broaden that a little bit and have, capability elements?

[00:37:59] It's interesting was talking to Ellen p Kowski, retired general p Kowski the other day, and that was tried a number of years ago and the thought was it was abused by the department. So Congress said no more of that. You understand the way behaviors go. I will say, I think NRO has a pretty good system and it's a smaller scale effort, but I think we can learn from what works and try to judiciously apply it.

[00:38:27] And we've got to be willing to get out there and experiment with some of this because the reality is we're debating these business issues while the Chinese are out there shooting hypersonic, missiles around the world.

[00:38:43] **Eric Lofgren:** I want to, give you some reactions of what I've heard from like oversight officials.

[00:38:49] They will say something like, we've given you these types of authorities in the past. It's not us, but you guys fail. And they'll bring up fcs, future combat systems, these types of. They'll say, oh, you just want these open-ended funds to prototype forever, but you never put it into the palm. It's not there in the production or in the procurement.

[00:39:06] So some, they're like you don't actually have a justified plan. We can't trust you until that justified plan comes. And so how would you react to some of those views?

[00:39:14] **Ellen Lord:** First of all, not ev I'm not gonna defend fcs. I'll just leave that one . But I think there's a dilemma because things change so much year to year.

[00:39:26] And it's wow, this was so hot. Now you're telling me you don't need it. And a lot of the dilemma gets back to the way data is passed to the Hill and J Books, which I won't go into the details, but basically that's where all the numbers are. And there's different levels of explanation in the J books for different from different services.

[00:39:49] For R D T and E, for procurement for on m and staffers will tell you that they have to go to different stacks of paper to try to hook it all together to get a narrative that makes sense. So on one hand they wanna understand the strategic vision. And would like it to remain fairly consistent because that's easier obviously.

[00:40:14] Whereas the department doesn't wanna over commit in the out years because they don't know what else is gonna happen geopolitically, what's gonna work, what's not gonna work. So it becomes a little bit of gamesmanship. So I think, again, there needs to be more transparency about what the plan is, but we can't predict the future.

[00:40:34] And that's where the difference, if you look at how industry does budgeting versus how the government does budgeting industry, large corporations have to look at out ears. But . They perhaps look at the risks a little bit more honestly, if you will. They acknowledge not to say that anything's dishonest about d o D, but it just doesn't get acknowledged because there's a fear of failure.

[00:41:01] Where I think we have to be very honest about that and say what the different pathways programs could have are because you don't know when you're developing something, you don't know what you don't know. And if you find something, you have to have the agility to go with it and field it

[00:41:18] **Mike Brown:** and test it.

[00:41:18] Yeah I would say and Ellen could speak to this too, as a former ceo, when you give your board of directors a budget that is an out years, everyone around the table, the ceo, the leadership team, the directors know that's a swag. Years two and three have a huge cone of uncertainty, and yet in the department we treat the Phi a, the future year defense plan, which goes out for four years beyond the current year as gospel.

[00:41:43] So that's a completely different perspective on and of course if you can change the fiep, but the first the input that starts when you do the budgeting process, the subsequent year is what was in the Fiep. It's not what do you need what's changed, what was in the fiep. And what's

[00:41:58] **Ellen Lord:** different is there's not the frequency and the detail of communication.

[00:42:05] That's what makes it so hard. And, we here have left out the whole situation that do D is incredibly constrained by OMB and going through the whole executive branch. So there are lots of things that do o d might wanna do, yet they don't have total freedom action. That takes quite a bit of time to get all the pass backs.

[00:42:25] And then you get into the complications of the way the N NSA budget comes into D O D for all the nuclear matters and so forth. So it, it's complex, but. I think we need to break it down and give individuals more authority, not just to manage, but to truly lead.

[00:42:45] **Eric Lofgren:** Before I, I definitely want to get to the PPV commission.

[00:42:48] But before that I want, it's a great topic, , but I want to get to one last question first, which it really is like honing in on this idea of capability of record or what a consolidated portfolio would look like. And Mike brought up the idea that, hey, counter uas, that's not a, that's not a service thing, right?

[00:43:07] And of course there is like the army has a counter, not service specific, not

[00:43:10] **Ellen Lord:** service Army. No, and it was, won't bo you with the details, but the idea was everybody was spending money on doing sort of the same thing. So now the Army's, the executive agent, or I can't remember what it's called, probably knows executive agent.

[00:43:23] Yeah. But I

[00:43:24] **Eric Lofgren:** guess

[00:43:24] **Mike Brown:** I wanted, let me just add to that point. They were the appointed, the executive agent. For assessing, but they don't procure

[00:43:31] **Ellen Lord:** anything. Yeah. Yeah. So it's a very strong recommendation. So it still allows for

[00:43:36] **Mike Brown:** service. We'll see how that works out the service to do anything they want if they choose.

[00:43:39] Yeah. Yeah. And I,

[00:43:40] **Eric Lofgren:** maybe this is, this gets to the core of what I wanted to ask, right? Because you mentioned it should be like a stable, like a consistent portfolio funding where you can have multiple lines of effort go on underneath that, but it's at a joint level, right? And so my question is, where does this thing sit?

[00:43:56] Is, does it sit with some kind of office that sits on top and then they delegate that money to the right program office? Or are you actually sending it down to the program offices and you have joint coordination through board committees, other types

[00:44:09] **Ellen Lord:** of structures? Yeah. So first of all, , I would not add one more layer in the Pentagon.

[00:44:14] I think we need to rip a few out. I think that if somebody wants to add a new office, one has to be taken away because of just mushrooms . But we have different services for a reason. They have different missions, they have different personalities. They have different talents. They have different focuses that is healthy and good.

[00:44:34] However, over time it's evolved that we really have this multi-domain interoperable battle space, is contested now. So everything has to be able to talk to one another and we have to understand it. From my point of view, I think we need to have requirements to be able to hook all these things together so that we don't have radios that can't talk and data links that don't talk to one another.

[00:45:01] That being said, if you have some common interface control requirements, I'll say, I think then the services should get the money and hand it down. And then there should be intervention by exception. Just like in industry, what does the corporate layer of industry do? And I look at OSD as the same thing to D O D with the military services being the operating units like the Army, Navy, air Force, so forth.

[00:45:29] And the agencies as well and O S D should only get involved when there is something super high risk, super high dollar, or it affects everybody the same way. So counter us is a good example. We all know that drones are a major. Weapon system now and we need effective counter systems and we only have so much money to spend on it.

[00:45:54] So it's good to coalesce that. But I think that's the way the money should flow and I think that there should be more discretion, but there has to be accountability through data to have the transparency to see what's going

[00:46:06] **Mike Brown:** on. Yeah, I think we talked about this before as it related to buying commercial items.

[00:46:11] So counter uas or uas AI software that you could have a executive agent, but they should have full responsibility, not just to recommend. They would get a budget that would be dedicated by Congress. Cuz you know you're gonna get that ongoing capability for small drones. They make the decision building in requirements from the other services for here's what the department is going to field and keep up with commercial technology.

[00:46:38] So I agree we shouldn't start a layered series of offices, but you have to have that executive agent. We have executive agents for other things. Give them a responsibility, give them the budget, have them be the supplier for all of d o d of these commercial items, which are not service specific. All right.

[00:46:54] So

[00:46:54] **Eric Lofgren:** Ellen, it, it really looks like the P B E commission, the Congressional Commission, it's really starting to gear up. It got a little bit of a slow start, but in the last couple months I've been seeing a lot of engagement, a lot of things online, and that's really great. So I just want you to talk about what is the commission's activities and what are you hoping

[00:47:09] **Ellen Lord:** for it?

[00:47:09] Absolutely. And the reason you didn't see much at first is because we were delayed getting our money because of the delay of the budget . Shockingly I'm very excited to say we have offices, modest offices in Crystal City. We have a website we have that just launched about a week ago. And if you want it, I even wrote it down for.

[00:47:28] P B E reform.senate.gov. Which brings up a very interesting point in that this is a congressional commission, so all of our employees are now congressional employees and that took a bit to sort out. But we are. Off and running. We've had 12 meetings. Now. The full commission, there are 14 commissioners.

[00:47:51] One dropped out needs to be replaced. But our first meeting was with the Deec Def, with Kath Hicks, which was great, where she very clearly gave us her expectations. And we've had listening tours with has sa hack d, sack D with programmers with planner. With industry focusing on software companies. Really the cutting edge, like Palantir Rebellion, Andrew, as well as a variety of other companies in the sustainment area and others.

[00:48:22] We have these 10 employees. They're mostly doing research because the law is very specific in terms of certain reports we have to generate. A lot of it's historically looking. We have two FFRDCs on contract and we have been reporting out again in separate meetings with Hack Dsac, d sa, and Hass, where there's been a really good amount of dialogue because we got a slow start because of the slow.

[00:48:51] Funding. It looks like now our interim report will be, we have to wait for the bill to come out, but it's probably gonna be in August of 23 with the final report in March of 24 is where we'll end up. We have been very transparent about sending back to the hill and to the building. What we're hearing we're saying we have no recommendations right now cuz it's way too early for recommendations.

[00:49:20] However or passing along a lot of it, we have a writer on board. So I'm excited because we're very focused on trying to pick the critical. And doing something very significant in terms of clear recommendations and not doing small nibbling around the edges, but to really have something substantive now.

[00:49:43] And Mike knows, Mike came that's encouraging. And he wanted to just blow the whole thing up, which I empathize with that, but I'm not sure we can. But I think there are a few themes that come out, if you will. I'll just say this quickly and stop. One is the incredible lack of trust and communication.

[00:50:00] Between D o D and Congress. There tends to be a lot of spotlight on when budgets get to Congress, what happens, but the whole DMAG process and everything inside the building, there's very little communication and I think everybody thinks there could be more and why not? So everybody gets so worried about Predecisional, but I think they hide behind that a little bit.

[00:50:26] So we're really teasing that out. There's, to carry on that theme, there's incredible inconsistency in the J books. So we're really having some deep dives on J books. What could be done? Talk a lot about reprogramming threshold. We talk a lot about the special authorities that different groups have and why that can't be scaled.

[00:50:50] Hearing a lot from people in the building. We went and met with Heidi Shoe and Bill a plant, which was great. Heard from them about what's the art of a possible. So there is a great diversity of opinion, but I think it's important that the dialogue's going and there are a lot of other sort of adjunct commissions that have cropped up, which I think is a good thing as well.

[00:51:13] And basically where we are right now is we are looking for scenarios, and I reach out to everybody listening here. What we need are examples of where P P B E. Used in a way that accelerated capability being fielded down range. Where did the system work? How did people do that? I like to think about the notion of what I call creative compliance.

[00:51:41] We're not all pilots. Pilots need to have their checklist and go through everything, but, just use what you need to be legal and ethical and move on. We need to get some good examples of how that was done. So perhaps we can replicate that. Just as importantly, we need very concrete examples of where things went sideways because without actual scenarios it is hard to have the proof points to really back up recommended changes or to of foot stomp what's right that we need to do.

[00:52:15] **Eric Lofgren:** I wanna give you guys just a one minute response on this cuz there's some concern that, this is like a once in a generation Goldwater nickels almost type thing, but it might be too late for the Davidson window 2027. What can we do in the near term to really affect that timeline?

[00:52:31] **Ellen Lord:** What's been really wonderful, there are a number of people out in industry right now who were former staffers, so they realize the lexicon that needs to be used.

[00:52:42] So when we get back ledge proposal ideas in the right kind of language, that's great because again, the commission can say we're not recommending this, but here's the type of feedback we're getting. Because a lot of the staffers want something that's actionable. This really is the decisive.

[00:53:00] Here we are at an inflection point. And the national security strategy says that we're talking about integrated deterrents. Not sure what that really means cuz that has to be fleshed out. But but now's the time to, get the funding going and flowing. So that we can build up the capacity and capability here because we flip the switches on, it takes a while to have the plant, the equipment, the tooling.

[00:53:24] And right now industry, you can't go to your board and say, Hey, we think the department's gonna order this in two years. Let's get building. It's just not gonna work.

[00:53:32] **Mike Brown:** Yeah. Maybe I can add so the Davidson window out, everybody knows that term from Admiral Phil Davidson, when he said to the Senate in testimony that he thought the Xi [Jinping] might move on Taiwan by 2027.

[00:53:44] And then recently there's a great book, the Danger Zone coming out, basically narrowing that to 2024 to 2027. So if you think that we might have to fight in that timeframe, You have to think now about what flexibility you're gonna create with the lessons of Ukraine in mind. So you'd want to think about how do I provide some flexibility, like the Pacific Deterrence initiative that Congress has that really can be applied for Taiwan too.

[00:54:09] Draw down capability that you'd want to give to Taiwan. Maybe a special line item that you want to create in the budget that allows for material to be shipped there, and maybe including food and medical supplies if you want to envision a blockade. So more scenario planning about what we might need to be doing.

[00:54:26] To defend in the Davidson window, and I think you'd wanna build that flexibility in now, meaning we won't have time to wait for the recommendations of the P p B commission. Put those into place that, that you're talking about the beyond the Davidson window.

[00:54:39] **Ellen Lord:** Yeah, but there are, and I'll tell you, a Blinken came out about a week ago, and I think he pulled that timeline.

[00:54:45] Forward a little bit. Because we can only develop so much capability and capacity, we have limited dollars. I think we have to remember that we're different from our strategic adversaries in that when we go to fight, we don't fight alone. We fight with our allies and partners.

[00:54:59] And right now, geopolitically Australia is so very important to us. They have leaned forward, they're putting a lot of money out there. They've articulated that they want to develop indigenous capability. So I think when people think about Aus, all they think about is nuclear submarines, which is incredibly important.

[00:55:18] However, there's a lot more to AUKUS. There's ai, there's quantum. They're munitions. They're missiles. There's also. All kinds of authorities under INT or the National Technology Innovation Base. I would say part of the way we need to get ready for she moving on Taiwan, if that does happen, is really leverage Australia and make sure that, do o d and the State Department work together very closely with Congress to make sure we start transferring technology there and get them to manufacture with us.

[00:55:51] Ellen

[00:55:51] **Eric Lofgren:** Lord Mike Brown, thanks so much for joining us.

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