If it’s broke – fix it
What to do about the UN disarmament machinery

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Thank you Mme chair for this opportunity to discuss some of the key findings of UNIDIR’s research that pertain to the discussion in the First Committee on the “Disarmament Machinery”. Thank you also to the previous presenters. Moreover, I’d like to especially to thank the Chair of the Board of Trustees of UNIDIR and the Secretary General’s Advisory Board on Disarmament Matters for her continual support and guidance – as an academic, as chair of the Board and as Foreign Minister of Nigeria.

In preparing for this presentation, I had thought about bringing in a large cardboard box full of rusting machinery and bring out examples of what happens when machinery is not maintained, oiled or used for a decade or more – but I thought that you all already know the effects of inaction and did not need such illustration. I also thought of asking some young fit people to help me push in a car that had been manufactured in 1978 and maintained up until 1996 then left to rust in order to demonstrate the antiquity of the UN disarmament machinery. Apparently UN security advised against trying to get such a wreck down the stairs.

So instead we are left with images that we need to conjure in our heads, imagining perhaps how we could assist the UN disarmament machinery.

In this presentation, I shall be drawing on some of the research undertaken by John Borrie and his colleagues, Ashley Thornton, Eoghan Murphy, Vanessa Martin and Aurelia Merçay working on UNIDIR’s project entitled, *Disarmament as Humanitarian Action; Rethinking Multilateralism.*

1. What is a machine?

In the physical sciences a machine is defined as:

- A system or device for doing work
- A system or device that performs or assists in the performance of a human task

By means of a machine, a smaller force, or effort, can be applied to move a much greater resistance, or load.

**The mechanical advantage of a machine**

The mechanical advantage of a machine is the factor by which it multiplies any applied force. In any real machine some of the effort is used to overcome friction and other forms of in-built resistance.
**The efficiency of a machine**

The efficiency of a machine is equal to the ratio of its output to its input. The efficiency of any machine measures the degree to which friction and other factors reduce the actual work output of the machine from its theoretical maximum. A frictionless machine would have an efficiency of 100%. A machine with an efficiency of 25% has an output of one quarter of its theoretical output.

In terms of effectiveness, efficiency and advantage, the disarmament machinery can hardly be said to be operating at its optimum. The cranks are certainly turning, the fans are blowing hot air alright but the output is low at best. Nevertheless, an inefficient machine is sometimes the only way to get a job done (take drilling into a concrete wall for example – huge amounts of energy are wasted in overcoming resistance and much of the output is only sound and heat and yet it is the only way to drill that much needed hole – so despite its inefficiency it is effective). Our problem at the moment is that, however efficient or inefficient out machinery is, the job of disarmament is just is not getting done. Our machine is not only inefficient (somewhere approximating 0% perhaps?), it has little mechanical advantage and is frequently ineffective.

2. What is political will?

Political will is the sustained determination to advance a public interest, even in the face of strong resistance**.

One of the many criticisms I hear when talking and writing about the disarmament machinery and its role in our problems is that to imagine that we can fix anything through tinkering with machinery is surely naïve. After all what we are lacking is simply political will, is it not?

Well no.

Political will abounds in this room. All of you are representing the political will of your governments and most of you are representing some accepted interpretation of the collective political will of the citizens of your countries. Many of your governments have strong political mandates to push forward on a range of disarmament matters and many of them do just that, in a sustained energetic manner. It is not political will that is lacking – it is agreement on direction that does not exist right now. In my view, the political will that does exist is pulling with equal force in opposite directions – a sure recipe for staying stuck in one place.

To rely on the lack of political will as an excuse for inaction is folly, and merely acts as a cover for not squaring up to some of the very real issues that we are facing. A lack of political is not sufficient to explain the lack of progress. The machinery that we have created to work for disarmament negotiations should be designed to work in all conditions. And so working on the machinery is not

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** Randy Rydell, private communication.
just tinkering at the edges while we wait for the political winds to change. What we need is an all-weather machine so that when we can’t agree on something, we can at least move forward on the issues where there is agreement. To quote a wise Russian proverb: *Agree when we can; negotiate when we can’t*. Creativity is needed most when the conditions are tough. But take heart. Necessity is the mother of invention, and so because we really need new disarmament machinery, we will now have to make new and improvise while we create.

Political action is not just about instructions from capitals or mandates from elections, it is also about your skills as negotiators, your knowledge, your expertise and your sustained efforts. It is about structures working practices and the creativity diplomats can bring to bear on a matter of pressing importance. We can all bring to mind examples of where this has worked against the odds and to great effect – in the CD, in the First Committee, in the Security Council and in all sorts of parallel track multilateral, plurilateral and bilateral processes.

3. Rethinking Multilateralism.

This past year UNIDIR celebrated its 25th Anniversary. Five years before that, to mark our 20th anniversary, UNIDIR ran a seminar here in New York, with DDA, entitled Disarmament as Humanitarian Action. Since then UNIDIR has been carrying out a research programme exploring the ways in which reframing disarmament could help us think through the issues that we are grappling with and help the diplomatic community with new ideas to help them see the way through the myriad of complex issues. We have brought in thinking from other disciplines such as physics, economics, psychology, mathematics and complexity theory. I can’t present all of our findings here – I shall provide you with a taster - but we have published a number of books on the research findings and do encourage you to read them***.

4. Communities of Practice

Those of you in this room represent what is called a *community of practice* – a group of people who, over a period of time, share in some set of social practices geared toward some common social purpose†.

Those practices include:

- Rules and procedures
- Roles and hierarchies
- Group discussions
- Like-minded-groups………etc..
- Working papers

*** For information about UNIDIR’s project on *Disarmament as Humanitarian Action: Making Multilateral Negotiations Work*, go to: www.unidir.org

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• Working lunches, receptions and dinners
• Cigarette and coffee breaks too

An understanding of how each of these works in this community, compared with other communities in other forums is what makes this a community of practice. All new entrants to this community have to be schooled very early on in the intricacies of what constitutes this community of practice, as you have experienced in your careers.

In this way of course, you are each of you more than mouthpieces of your governments (but you already knew that 😊). Your interactions with each other matter. Your interactions are dynamic. Your personalities matter. How you deal with complexity matters – and some things are indeed complex. The technical, social, economic aspects of weapons systems are all interconnected and your understanding of these relationships, as well as your understanding of the specifics of each aspect, is crucial to success.

We know from complexity theory and social interactive dynamics, that phase transitions, or tipping points, can occur very suddenly in such situations. For example, we can go from a year of success (in say 1995-1996 re the NPT and CTBT) to year after year of complete failure (in the CD). The upside is that these tipping points can move us in other directions also. We could be at one of those points now in the CD: maybe it will take one more push in a creative way to begin fissile material negotiations, maybe not. Meanwhile, we at UNIDIR are developing models to try to help us analyse such dynamics and make practical recommendations to help.

5. Cooperation and trust

International relations is often viewed – not least by policy researchers observing what you’re trying to do – as essentially the theoretical problem of cooperation played out in reality among states with different levels of interest, power and resources. In some multilateral contexts, such as the CD, structural or institutional factors constrain the ways in which cooperation can develop.

This all sounds a bit abstract unless we also see the reality you face everyday, that people represent each state, and these people interact, which is what adds up to state interaction. Multilateral environments that promote and facilitate contact, as well as the development of social trust between you – in turn enabling more flexible arrangements for dialogue and the emergence of cooperation – are likely to be more productive. John Borrie and his team have coined a name for this – they call it the cognitive ergonomics of multilateral negotiating.

In modelling the emergence of cooperation, experiments comparing different individual strategies found that tit-for-tat or, better put, “do unto others as they do unto you” is often the most successful. In negotiations where people work in teams or groups, agreements are easier to reach when negotiations are
framed as “win some - lose some” situations and compromise is required. Whereas, agreements are harder to reach when the outcome is framed as an all-or-nothing end game. Working in teams develops allows individuals to pool their knowledge and ideas and compromise more easily because they do not perceive compromise as self-sacrifice, rather they see themselves as part of a team working together in which give and take is a vital part of the game.

However, there is a downside to working in groups. Whilst two or three like-minded individuals in a group can foster cooperation and effective communication, they can inadvertently have the effect of alienating others and decreasing trust with partners outside the group. There seems to be a fine line between working effectively as a team to create agreement and having the opposite effect.

We also know that group dynamics make a large difference to the degree of cooperation in a group. If people believe that others are cooperating then they are more likely to cooperate. For example if people believe that cheating on taxes is widespread, then they are more likely to cheat. The reverse is also true.

Research shows that social pressure – rewards and punishments – encourages cooperation in negotiations. Establishing personal trusting relationships can be used to good effect to persuade actors to follow social norms. And the larger the group, the larger the social pressure, and the stronger the influence. So large, tightly knit groups with clear, shared objectives can persuade those in disagreement to follow the rules.

6. Numbers

Recent research has shown that humans can effectively maintain relationships of up to around 150 people. UNIDIR’s Disarmament as Humanitarian Action project has been asking: how does this limiting capacity effect multilateral negotiations of 190+ countries and hundreds of individuals all trying to work together?

The answer is: adversely.

Work has shown that as the number of participants increase inside a negotiation, the longer it takes to negotiate the same issue. This could well be due to the increase in interpersonal complexity – just remembering all those names is hard enough! Remembering past experiences – how individuals behaved, how they responded, are they trustworthy, are they discrete, etc – is much harder with larger groups. Keeping track of past behaviour in order to implement an effective long term negotiating strategy is far from trivial in large groups, particularly when individuals change frequently due to diplomatic rotation.

Although we need large groups to create social pressure and persuade others effectively, large groups also increase the opportunity to free-ride. It is cognitively harder to track everyone in a group and some people take
advantage of this and contribute less to the group (called social loafing – I’m sure that nobody in this room would dream of doing such a thing).

Current research strongly suggests that we humans work best in groups of up to 28 people. After 28, although cognitive diversity increases and social pressure increases, group cohesion and group trust decreases.

7. So where does all this lead us?

In terms of negotiating dynamics it seems that we need to work in groups to be most effective. Large groups provide social pressure and a diverse range of knowledge, expertise and experience. BUT in groups larger than 150 interlocutors, humans find it hard to keep track. Communication is strained to its limits. In this respect modern negotiations are pushing us beyond our cognitive limits. These limits make it hard for us within the UN system to develop and sustain social trust.

We work better in small groups for some things. Like-minded coalitions of about twenty-eight people can be very effective in encouraging agreement. A group of roughly this size allows for strong social bonding and development of working rapport and trust. Such a group can then reach out to others, individuals and groups, to present their coherent views and build on their approach to reach a large number. However, those outside the group can – if great care is not taken – view groups like this with suspicion. One effective way is a process of intersecting like-minded groups, each of which can, if appropriate and if possible, include civil society representatives in addition to states’ negotiators, whereby there is cooperation across groups to achieve a shared objective and achieve an end goal. Research clearly demonstrates that action provides cohesion within and across groups. All talk and no action, will serve to quickly undermine group cohesion.

One possibility to make the best of both large group and small group negotiating dynamics would be multi-track processes. The tracks would allow all members of a larger group to work in small groups if they wanted. These tracks can be governmental, (called track one), non-governmental (called track two) or a mixture of both governments and con-governmental experts. In a way that is what this community has tried to do with the governmental regional and political group systems. The problem with the current arrangements is that the groups are stagnant, often not like-minded and rather than providing an opportunity for creative thinking, they tend to rely on past practice as a precedent and remain stuck in a repetition of old policies. What we require is a more fluid, pragmatic approach to groups and coalitions – specifically around certain issues. We have seen successful attempts at this over recent years (the most successful have mixed governmental and non-governmental actors such as NGOs, think-tanks and academics) and such attempts are to be encouraged – but take care that they also don’t fall into the same trap of ossification over a period of time.

In conclusion, we are in the process of understanding the cognitive ergonomics of negotiations. Many of you know this instinctively. Many of you
know it from vast experience. That is because you are good at being negotiators. And you should be – that is why you are entrusted with these important tasks. But we have also detected a nervousness or defensiveness over such excellent working practices – for example like-minded groups or parallel track processes or processes that mix governmental and non-governmental experts. Our research shows that these are clear ways that make multilateralism work more effectively.

A system of disarmament machinery that facilitates interaction, develops trust and thus increases flexibility, dialogue and cooperation is likely to be more productive. For those of you who are already working in this way, take heart, you are backed up by considerable research from a wide range of disciplines, discussed further in a forthcoming volume UNIDIR will publish shortly.

UNIDIR is planning to work in the next couple of years to assist you through further research to help you assess how to renovate the disarmament machinery, and get it to a state in which – although the original, model may be a classic, circa 1978 – the engine, the tuning and the steering is decidedly 21st Century.

Thank you Mme Chair.

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