

Members of IANSA meet with the chair of BMS5, Ambassador Zahir Tanin, UN headquarters, New York, 17 June 2014. © International Action Network on Small Arms (IANSA)



# One Meeting after Another

## UN PROCESS UPDATE

### INTRODUCTION

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Nine rounds of informal consultations before the meeting. Multiple formal and informal sessions at the meeting itself. Seven draft outcome documents. The final outcome of the Fifth Biennial Meeting of States (BMS5),<sup>1</sup> the latest in a series of meetings on the UN Programme of Action (PoA),<sup>2</sup> was the product of months of work and intense diplomatic effort. But was it worth it?

This chapter, drawing on official documents and the author's own observations of the meeting, including its preparatory phase, seeks to answer this question. In addition to conducting a retrospective analysis of BMS5, centred on an examination of the meeting outcome document, the chapter also looks ahead to the next meeting on the PoA calendar, the Second Open-ended Meeting of Governmental Experts (MGE2), scheduled for June 2015. As explained in the chapter, BMS5 fits within a broader framework that includes the PoA, its follow-up meetings, and practical follow-up on the outcomes of those meetings.

The chapter's main conclusions include the following:

- Following months of intense diplomatic activity, the BMS5 process produced an outcome document featuring practical implementation measures in the areas that states discussed (stockpile management; marking, record-keeping, and tracing; and international cooperation and assistance).
- The BMS5 outcome builds on previous PoA meeting outcomes by, for example, promoting women's participation in PoA-related processes, highlighting the importance of stockpile security and weapons tracing in conflict and post-conflict situations, and emphasizing training in building sustainable capacity for PoA implementation.
- The BMS5 text also encourages the exchange of tracing results and other information, as well as robust stockpile management, for purposes of reducing diversion risks.
- Modular weapons design complicates the task of unique identification, which is essential for tracing. Policy responses include the identification of a 'control component' for these weapons.
- Unlike metal firearms, polymer guns are difficult to mark durably, as the International Tracing Instrument (ITI)<sup>3</sup> prescribes. Policy guidance is needed on issues such as the marking methods applicable to polymer firearm parts and the depth and placement of such markings.
- Current norms, both national and international, are largely adequate for the control of 3D-printed firearms, but their application is more difficult. Governments, moreover, have a clear interest in preparing for the day when fully functional 3D-printed firearms can be produced easily and economically.
- Certain new technologies could improve weapons marking, record-keeping, and tracing, strengthen stockpile security, and prevent unauthorized use, but critical barriers to their adoption and diffusion must first be overcome.

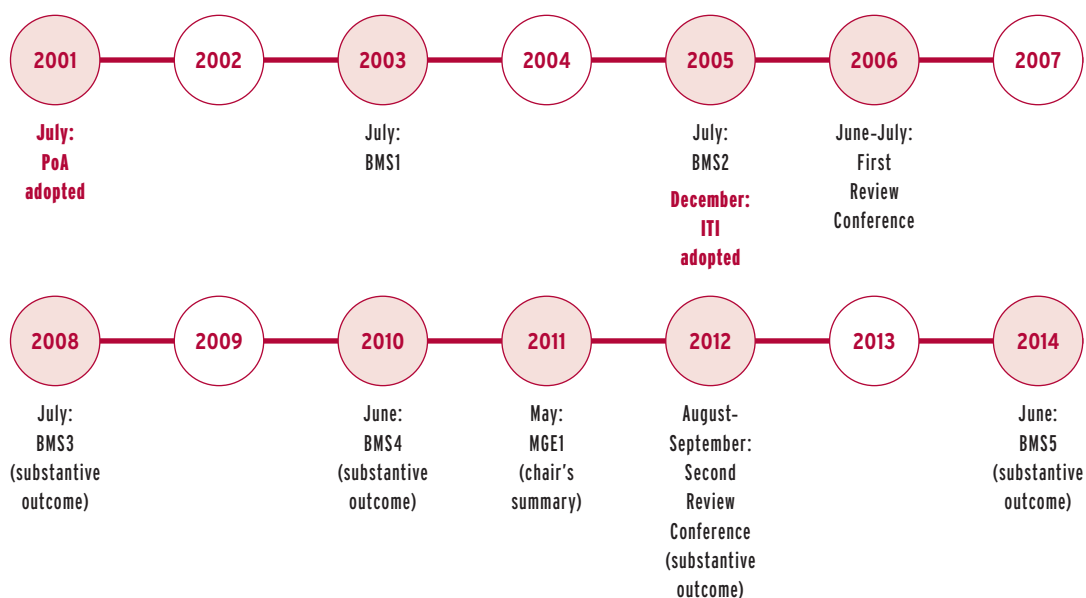
This chapter begins by placing BMS5 in the broader context of the UN small arms process and recounts the steps taken on the road to the adoption of the outcome document. It then focuses on that outcome, identifying sources of value added in the three substantive sections of the BMS5 text—stockpile management; marking, record-keeping, and tracing; and international cooperation and assistance—as well as its follow-up section. BMS5 successfully dealt with one important element of follow-up, namely defining the mandate for MGE2. The chapter also examines, issue-by-issue, some of the new developments and technologies, both adopted and prospective, that are up for discussion at MGE2 and that challenge key premises of small arms control, specifically as articulated in the PoA and ITI.

## JOURNEY OF A THOUSAND MEETINGS: THE BMS5 PROCESS

The mandate for BMS5 originally stems from the PoA and, more immediately, from the PoA's Second Review Conference and the UN General Assembly resolutions that gave effect to the meeting schedule agreed at the Conference.<sup>4</sup> While the same resolutions indicated that BMS5 was 'to consider the full and effective implementation of the Programme of Action' (UNGA, 2012b, para. 5; 2013b, para. 5), as described below, this formal, but somewhat open-ended, mandate was less important than the practice that had shaped both the process and substance of PoA meetings since 2008.

By the time of the PoA's Second Review Conference (2012), three distinct types of meeting had emerged (see Figure 3.1). Review conferences, also mentioned in the PoA (UNGA, 2001b, para. IV.1.a), were relatively high-level diplomatic events, important for setting priorities for future PoA and ITI implementation, including the question of future meetings.<sup>5</sup> Open-ended meetings of governmental experts, the first of which was held in May 2011, were, as the name indicates, expert-led—involving police officials responsible for tracing, for example—and focused on the exchange of information concerning 'implementation challenges and opportunities', rather than the negotiation of agreed meeting text (UNGA, 2008b, para. 13).<sup>6</sup>

Figure 3.1 **Timeline of PoA meetings**



BMSs, in essence, fell between review conferences and MGEs; while they were diplomat- rather than expert-driven, they were less focused on broad agenda-setting, and more concerned with practical implementation in specific substantive areas. The first two BMSs, convened in July 2003 and July 2005, were lacklustre affairs that covered all aspects of the PoA, largely through the prism of one-way national statements, and that yielded no collective agreement on future action; neither BMS1 or BMS2 produced agreed substantive outcomes. Under the chairmanship of Ambassador Dalius Čekuolis of Lithuania, BMS3, convened in July 2008, took a new, more focused approach that led to an agreed outcome document (see Box 3.1). The same method of work was applied for BMS4, in 2010, which again resulted in a substantive outcome.

Like BMS3 and BMS4, BMS5 got off to an early start, with the nomination of the chair-designate, Ambassador Zahir Tanin of Afghanistan, in August 2013—some ten months prior to BMS5.<sup>9</sup> Ambassador Tanin held his first round of open-ended consultations<sup>10</sup> on BMS5 at UN headquarters in New York on 25 October 2013. The initial consultations focused on reaching provisional agreement on the BMS5 agenda, in particular the substantive meeting themes. The topics of ITI implementation and international cooperation and assistance were given, having been agreed previously.<sup>11</sup> ‘Stockpile management, including physical security measures of small arms and light weapons’, was added to the list.<sup>12</sup>

In late 2013 and early 2014, states turned their attention to the identification of focus areas within the agreed agenda items and, as of March 2014, to the consideration of draft text produced by the chair-designate.<sup>13</sup> Ambassador Tanin put forward five draft versions of the BMS5 outcome document in advance of the meeting itself. While the ‘zero draft’ that he issued on 5 March was limited to a list of ‘proposed topics’ and a draft structure for the BMS5 outcome (Afghanistan, 2014b), subsequent drafts, beginning with the ‘Draft 1’ he produced on 7 May (Afghanistan, 2014c), put substantial flesh on this skeleton. All told, Ambassador Tanin convened nine rounds of informal consultations, eight in New York and one in Geneva—a flurry of diplomatic activity that surpassed, by a fair margin, that which had accompanied BMS3 and BMS4, themselves no slouches in this regard.

On the eve of BMS5, the chair’s draft outcome document (‘Draft 4’) (Afghanistan, 2014d; UNGA, 2014d) was relatively close to the final version in its general structure and content. Although specific language would change significantly, Draft 4 included almost all of the issues that would figure in the final outcome document.

### Box 3.1 New twists to the old method

The method of work Ambassador Dalius Čekuolis of Lithuania employed for BMS3 comprised various elements designed to keep the meeting ‘focused and [to] avoid the politicization of technical issues’ (Čekuolis, 2008, p. 23).<sup>7</sup> In preparing for BMS5 and in conducting the meeting itself, Ambassador Zahir Tanin of Afghanistan used most of the same elements. They included ‘[e]xtensive consultation’; limiting the number of topics for discussion and ‘deepening discussion on those’; posting national statements on the UN website, while encouraging delegations to read condensed versions of their statements at the meeting itself; and ‘[d]ispensing with the general exchange of views’, instead moving directly to the discussion of substantive meeting themes (p. 23).

Breaking with the approach taken at BMS3, BMS4, and the Second Review Conference, Ambassador Tanin did not use facilitators—except for the discussions on the ITI, which, in keeping with past practice, were shepherded by an ITI moderator, Anthony Simpson of New Zealand.<sup>8</sup> This was made possible by the reduced number of substantive topics at BMS5—three, as opposed to four for both BMS3 and BMS4—and, as noted elsewhere in the chapter, by the extensive preparatory work Ambassador Tanin had undertaken, such as securing early agreement on a provisional meeting agenda (UNGA, 2014b) and conducting five rounds of informal consultations devoted to consideration of his draft meeting text (fifth to ninth consultations). While the chairs of BMS3 and BMS4 had also submitted draft outcome text in advance of each biennial meeting, Ambassador Tanin embarked on the task much earlier—in this regard, following the example of the PoA’s Second Review Conference, rather than the preceding BMSs.

BMS5, held at UN headquarters in New York from 16 to 20 June 2014, followed two parallel paths. The first, defined by the formal meeting agenda and ‘programme of work’ (UNGA, 2014b; 2014c), comprised formal statements on the various meeting topics—mostly from states, but also, on 19 June, from representatives of civil society and international organizations (see Box 3.2). The second track, which to some extent overshadowed the first,<sup>14</sup> consisted of a series of informal meetings or ‘consultations’ that were restricted to states and designed to narrow differences on the draft outcome document.

As at previous PoA meetings, several contentious issues, such as ammunition, Security Council work, and the relative strength of commitments for international assistance, would take a significant share of meeting time. New bones of contention also arose—in particular,

the relationship between the PoA and the Arms Trade Treaty (ATT), the latter having been adopted, in April 2013, after the last PoA meeting, in August–September 2012 (Second Review Conference).

Early on 19 June, on the basis of inputs received at the meeting, Ambassador Tanin issued a new version of the draft outcome document (‘Draft 5’) (Afghanistan, 2014e), which was discussed that same day. On the morning of the final day of the meeting, 20 June, the chair issued another revised text (UNGA, 2014e). That afternoon, after a few last fixes to this text,<sup>19</sup> UN member states adopted the BMS5 outcome document, along with the meeting report, by consensus (UNGA, 2014g; 2014f).

### Box 3.2 Survivor: IANSA at BMS5

There was speculation about how effective the NGO umbrella group, the International Action Network on Small Arms (IANSA), would be at BMS5 as it had lost its international secretariat due to funding shortfalls. Expectations for the meeting were low among some IANSA-affiliated NGOs, one of which announced its intention to skip the meeting (Mack, 2014).

In the event, IANSA’s contribution to BMS5 was significant. As at previous PoA meetings, NGOs and research institutes, in collaboration with states and international organizations, organized a series of ‘side events’ that highlighted various small arms- and armed violence-related issues.<sup>15</sup> NGOs also took to the floor on the morning of 19 June to give prepared statements in plenary session.<sup>16</sup> Later the same day, during consultations on the draft outcome document, several states cited the IANSA presentations of the morning and other civil society inputs,<sup>17</sup> as they stressed the importance of a meaningful meeting outcome. Behind the scenes at BMS5, as during the negotiations on the Arms Trade Treaty (UNGA, 2013a), NGOs also liaised with national delegations, alerting them to perceived weaknesses in the draft outcome document and proposing fixes that, in some cases, found their way into the final meeting text.

While the debate among IANSA-affiliated NGOs about the value of BMS5, and the UN small arms process generally, has yet to subside,<sup>18</sup> these groups made their presence, and even absence, felt at BMS5.

## ANATOMY OF AN OUTCOME: THE BMS5 TEXT

The BMS5 outcome document comprises a five-paragraph introductory part, three sections covering the main meeting themes (stockpile management, the ITI, and international cooperation and assistance), a section on meeting follow-up, and a final, brief<sup>20</sup> ‘other issues’ section. As described in greater detail below, certain subjects figure in two or more sections of the document. They include:

- the application of the PoA and ITI to conflict and post-conflict situations;
- the participation of women in small arms control efforts;
- diversion; and
- recent developments in small arms manufacturing, technology, and design.

A few topics that figure prominently in the section on international cooperation and assistance, including the transfer of technology and equipment, capacity building, and research and training, are also echoed in other parts of the BMS5 outcome. The following sections assess the contents of the outcome document, including the question of whether the text adds value to pre-existing PoA-related documentation.

## Stockpile management

The subject of stockpile management had been addressed quite comprehensively at BMS3.<sup>21</sup> For BMS5, the challenge was to build on this earlier discussion.

**Application to conflict and post-conflict situations.** In the first instance, the BMS5 outcome document underlines the importance of stockpile management ‘in settings of armed violence, transnational organized crime and conflict and post-conflict situations’ (UNGA, 2014g, para. 6), a somewhat broader set of reference points than is typically found in PoA-related documentation relating to stockpile management. In several places, however, the document emphasizes the application of stockpile management to ‘conflict and post-conflict situations’, citing, in this regard, disarmament, demobilization, and reintegration (DDR) programmes, UN peacekeeping, and ‘other relevant national programmes’ (paras. 7–8, 17b).<sup>22</sup> The PoA does not explicitly link stockpile security and UN peacekeeping.<sup>23</sup> The fact that this connection is ‘noted’ in the BMS5 outcome (para. 7) represents something of a step forward—although earlier draft versions of the BMS5 outcome contained additional references to UN peacekeeping and related Security Council work.<sup>24</sup>



Weapons and ammunition stored in a disused factory in Lubumbashi, Katanga province, DRC, February, 2009. © Gwenn Dubourthoumieu/MAG

**Life-cycle management.** Although the BMS5 outcome makes few explicit references to the identification and disposal of surplus small arms, an issue BMS3 dealt with in some detail,<sup>25</sup> it arguably broaches the subject in a more holistic way by referring to ‘life-cycle management procedures’ (UNGA, 2014g, paras. 11, 17e). While this term is typically used in relation to ammunition,<sup>26</sup> it would normally include design, procurement, storage, and use—in addition to final disposal. The BMS5 text, however, does not explain the term.

**The key norms on stockpile management remain those found in the PoA.** **Guidelines for stockpile management.** Like the BMS3 outcome, the BMS5 text makes a reference to ‘guidelines’ for stockpile management;<sup>27</sup> but it is unclear how these differ from the ‘standards and procedures’ that the PoA refers to in its core provision on stockpile management (UNGA, 2001b, para. II.17). Moreover, BMS5 language referring to ‘standards’, ‘procedures’, and ‘guidelines’ is heavily qualified,<sup>28</sup> in contrast to the PoA, which anchors its exception to the norm of ‘adequate and detailed standards and procedures’ in a narrower reference to the ‘constitutional and legal systems of States’ (para. II.17).

**Other provisions.** The stockpile management section also includes language encouraging the sharing of information and good practices on stockpile management (UNGA, 2014g, paras. 12, 16, 17f) and the sharing of ‘experience and research in the area of diversion’ (para. 13). In line with the outcome of the PoA’s Second Review Conference and the UN’s broader agenda concerning women, peace, and security,<sup>29</sup> it also promotes the ‘meaningful participation and representation’ of women in PoA-related ‘policymaking, planning and implementation processes’, including in the areas of stockpile management, and awareness-raising and education (para. 17d)—building on an equivalent provision in the Review Conference outcome.<sup>30</sup> Finally, international cooperation and assistance, addressed in a general way in section III of the BMS5 text, is also approached through a stockpile management lens, with a focus on training and, to some extent, technology transfer (paras. 14–17, 38c).

These provisions, in conjunction with those cited earlier in this section, and like those contained in the BMS3 outcome,<sup>31</sup> offer national governments and other stakeholders detailed guidance on the implementation of PoA provisions on stockpile management, including in conflict and post-conflict situations. They do not, however, constitute a normative shift in the area of stockpile management. The key norms remain those found in the PoA.<sup>32</sup>

### The International Tracing Instrument

Although it is a separate instrument, the ITI, devoted to weapons marking, record-keeping, and tracing, was developed within the framework of the PoA. BMS5 was the third time the UN membership took up the ITI in the context of a BMS. While the first such meeting, BMS3, had seen UN member states engage with the new instrument in a relatively ‘practical and focused’ way,<sup>33</sup> BMS4 saw them in a holding pattern, with the meeting outcome on the ITI offering little value added over its predecessor.<sup>34</sup> In fact, the BMS5 outcome on the ITI takes its cue not from the BMS3 and BMS4 texts, but from the outcome document of the PoA’s Second Review Conference—and, before it, the 2011 MGE (MGE1). The gains in the BMS5 text are modest, but it does give more concrete expression to several issues that the Review Conference document only sketched out in rough form.

**Conflict tracing.** The first of these issues is the tracing of small arms and light weapons in conflict and post-conflict situations (‘conflict tracing’), an application of the ITI that, while embedded in the instrument itself, was not given much attention before the Second Review Conference.<sup>35</sup> The tracing of weapons in countries suffering or emerging from armed conflict can serve to detect violations of applicable arms embargoes, spot attempts to rearm, and expose

weaknesses in stockpile management (the diversion of weapons from government or peacekeeping force stockpiles).<sup>36</sup>

Paragraph 21 of the BMS5 text highlights, in a general way, the utility of exchanging tracing information relating to conflict and post-conflict situations, as well as crime, while paragraph 27g calls for ‘the enhanced exchange’ of tracing information ‘between relevant United Nations entities’. Both paragraphs cite the potential application of conflict tracing to ‘the planning and implementation of [DDR] programmes and other relevant national programmes’. Paragraph 27f, meanwhile, encourages the provision of support for tracing to governments that host UN peacekeeping missions. Building on general language contained in the outcome of the Second Review Conference,<sup>37</sup> UN member states are, in effect, starting to work out some of the practical modalities for the tracing of small arms in conflict and post-conflict situations. In conjunction with related efforts by the UN Security Council,<sup>38</sup> conflict tracing is now taking a more tangible form at the UN.

**Exchanging tracing results and preventing diversion.** A second step forward on ITI-related matters at the Second Review Conference, building on discussions at MGE1, was to promote the exchange of tracing results, both within governments and with other states.<sup>39</sup> Among other things, this can raise awareness of significant diversion risks among relevant governmental agencies, including export licensing departments. The ITI section of the BMS5 outcome document similarly emphasizes the importance of exchanging tracing information in order to prevent diversion,<sup>40</sup> but also stresses its utility generally.<sup>41</sup> In fact, the diversion of small arms from legal to illicit spheres is a concern that cuts across the ITI and stockpile management sections. The BMS5 text frequently cites the exchange of tracing results and other information, as well as robust stockpile management and security, as important means of reducing diversion risks.<sup>42</sup>

**New technologies.** The ITI section of the BMS5 outcome takes up a further issue, one that was introduced at MGE1 and given more concrete expression at the Second Review Conference, namely the ‘implications of recent developments in small arms and light weapons manufacturing, technology and design for effective marking, record-keeping and tracing’ (UNGA, 2012a, annexe II, para. 3g).<sup>43</sup> The Second Review Conference had requested that the UN Secretary-General report on these issues (para. 3g), and the resulting document was published shortly before BMS5 (UNGA, 2014a). At BMS5, states did not really grapple with the contents of the report, preferring instead to refer to these developments in general terms, including the challenges and opportunities they present for ITI implementation (UNGA, 2014g, paras. 19–20). The UN membership did indicate that it would consider the implications of these developments for the ITI, including ‘practical steps to ensure the continued and enhanced effectiveness of national marking, record-keeping and tracing systems’ (para. 27d), but it basically kicked the topic farther down the road, proposing it for discussion at the PoA’s Second MGE (MGE2), to be held in June 2015 (para. 40a–b).<sup>44</sup> In addition, states recommended that the UN Secretary-General provide further information on the subject and ‘encouraged engagement with industry [ . . . ] to ensure that the parties involved remain fully informed of relevant technical developments’ (paras. 27e, 47).<sup>45</sup>



A shell casing is placed under a microscope to identify markings scored on it when fired from a handgun during a demonstration by the New York State Police, Albany, 2008.  
© Mike Groll/AP Photo



**Other provisions.** There are few other sources of value added in the ITI section of the BMS5 outcome. At the Second Review Conference, states had undertaken to ‘designate, where they have not done so, [ . . . ] before the next review conference’ the national points of contact mandated by the ITI (UNGA, 2012a, annexe II, para. 2f).<sup>46</sup> The BMS5 text reiterates the commitment to designate one or more national points of contact, but without mentioning the deadline of the Third Review Conference, which had been agreed at the Second Review Conference (UNGA, 2014g, paras. 24, 27h). The BMS5 outcome also makes reference to import marking (para. 23), which is important to effective tracing and largely neglected in the BMS4 outcome,<sup>47</sup> but adds nothing to the ITI itself.<sup>48</sup>

One can identify a few new wrinkles in the provisions of the ITI section dealing with international cooperation and assistance, for example:

- the implications of ‘developments in small arm and light weapon manufacturing, technology and design [ . . . ] for international assistance and capacity-building’ (para. 27d);
- the possible development of ‘a comprehensive international assistance framework’ to support ITI implementation (para. 27i); and
- ‘adequate technical and financial assistance to strengthen national capacities for ballistics information collection and exchange’ (para. 27k).

The BMS5 outcome stresses capacity building, training, and the transfer of technology and equipment.

Yet, as often arises with the topic of international cooperation and assistance, commitments are few, qualifiers many (‘consider’, ‘encourage’). In fact, battle lines were drawn on this very issue during the negotiations on the BMS5 section devoted to international cooperation and assistance.

### International cooperation and assistance

The BMS5 outcome document, generally—not only its section on international cooperation and assistance—emphasizes three subjects that were part of the meeting agenda:<sup>49</sup> capacity building,<sup>50</sup> training,<sup>51</sup> and the transfer of technology and equipment.<sup>52</sup> It also puts these topics on the agenda of MGE2 (UNGA, 2014g, para. 40c). In addition, the international cooperation and assistance section, applicable to both the PoA and ITI,<sup>53</sup> reprises some of the themes of past PoA meetings,<sup>54</sup> such as:

- ensuring the ‘adequacy, effectiveness and sustainability’ of international cooperation and assistance (UNGA, 2014g, paras. 29, 38a, 38(n)(i));<sup>55</sup>
- increasing ‘the measurability and effectiveness of international cooperation and assistance’ (para. 37);<sup>56</sup>
- improving the ‘matching of needs with available resources’ (para. 35);
- using national reports on PoA and ITI implementation ‘to identify, prioritize and communicate assistance needs’ (para. 38f);
- ‘preventing and reducing the devastating consequences’ of the illicit small arms trade on children (para. 38j);<sup>57</sup>
- strengthening cooperation in addressing the illicit trade in small arms and light weapons across borders, in particular at the sub-regional and regional levels (paras. 33, 38k);<sup>58</sup> and
- facilitating the participation and representation of women in international cooperation and assistance for PoA and ITI implementation (para. 31).<sup>59</sup>

The BMS5 outcome outlines several additional steps for purposes of strengthening international cooperation and assistance for PoA and ITI implementation, including:

- enhancing the exchange and utilization of knowledge, expertise, and lessons learned—including expertise and technical capabilities available in developing countries and at the regional and sub-regional levels (paras. 28, 32, 38h–i);
- avoiding duplication in the provision of, or requests for, assistance, including through coordination with relevant regional and sub-regional organizations (paras. 38g–h);
- cooperating with the UN regional centres for peace and disarmament, the World Customs Organization, INTERPOL, and the UN Office on Drugs and Crime in implementing the PoA and ITI (para. 38l); and
- sustaining collaboration between the UN Secretariat and relevant research and training institutions, including through the provision of information relating to PoA and ITI implementation (para. 38(n)(ii)–(iii)).

Overall, in line with the outcome of the Second Review Conference,<sup>60</sup> the language in the BMS5 text’s international cooperation and assistance section is relatively strong. Whereas states typically agree only to ‘seriously consider rendering assistance’ under the PoA (UNGA, 2001b, para. III.3),<sup>61</sup> they are less equivocal in the BMS5 outcome:

*States also reaffirmed that international cooperation and assistance should be rendered upon request, as appropriate, in line with the needs and priorities of recipient States, and that its adequacy, effectiveness and sustainability should be ensured* (UNGA, 2014g, para. 29).

Qualifiers remain, however. In the BMS5 outcome, one of the most frequently used is the phrase ‘as appropriate’, employed in the provision quoted above. Most significantly, text championed by the Non-Aligned Movement, which emphasized that PoA assistance should be unconditional,<sup>62</sup> as reflected in the draft outcome document the chair proposed for BMS5,<sup>63</sup> was dropped from the last versions of the document in the face of opposition from donor countries.

**BMS5 language on international cooperation and assistance is relatively strong.**

## Follow-up

The follow-up section of the BMS5 outcome document borrows its structure and much of its content from the outcome of the Second Review Conference.<sup>64</sup> Borrowed content includes: a recap of the schedule of meetings agreed for the period from 2012 to 2018;<sup>65</sup> reaffirmation of ‘the importance of the early designation of the chair of future [PoA] meetings’ (UNGA, 2014g, para. 42);<sup>66</sup> text encouraging ‘a maximum of synergies’ between national, regional, and global-level meetings and action on small arms (paras. 44–45);<sup>67</sup> two paragraphs encouraging the engagement of civil society, including industry, in the implementation of the PoA and ITI (paras. 46–47);<sup>68</sup> and text promoting the provision of financial support for ‘wider and more equitable’ PoA meeting participation (para. 50).<sup>69</sup>

While the BMS5 follow-up section also repeats the Review Conference recommendation to ‘improve the utility’ of national reports on PoA and ITI implementation by synchronizing them with BMSs and review conferences (para. 48),<sup>70</sup> it builds on the Review Conference text by urging the use of national reports ‘to identify implementation trends and challenges’ (para. 49). Given the UN membership’s continuing aversion to the formal monitoring of PoA and ITI implementation, this could help generate an improved picture of overall implementation.<sup>71</sup> The BMS5 text also goes further than the Review Conference outcome by citing ‘the important role of regional and subregional organizations [ . . . ] in building capacity and promoting cooperation and assistance’ for PoA and ITI implementation (para. 43).

Most importantly, however, the BMS5 outcome document sketches out the mandate for MGE2. In line with the outcomes of past PoA meetings, in particular the Second Review Conference,<sup>72</sup> the BMS5 text reaffirms that the topic of international cooperation and assistance ‘should continue to be an integral element of the agenda of all [PoA] meetings’ (para. 41). More specifically, it recommends that MGE2 take up the question of the ‘transfer of technology and equipment, as well as capacity-building, in particular training’, for PoA and ITI implementation (para. 40c). In addition,

it proposes that MGE2 consider ‘recent developments in small arm and light weapon manufacturing, technology and design’, including ‘[p]ractical steps to ensure the continued and enhanced effectiveness of national marking, record-keeping and tracing systems in the light of such developments’ (paras. 40a–b). In its annual resolution on small arms, the UN General Assembly subsequently confirmed this mandate (UNGA, 2014h, para. 6).

As articulated in the BMS5 outcome, preparatory steps for MGE2 include the presentation, by the UN Secretariat, of options for the enhanced funding of implementation-related activities and for the establishment of PoA- and ITI-related training programmes, as well as a UN study on ‘the adequacy, effectiveness and sustainability of financial and technical assistance’ since the time of the PoA’s adoption in 2001. The BMS5 outcome specifies that the latter study is to be discussed at MGE2 (2015) and considered at BMS6 (2016) (paras. 38m, 38(n)(i)).

**There are several sources of value added in the BMS5 outcome.**

While it remains to be seen whether these follow-up measures will yield tangible results over the medium and long term, specifically in terms of strengthened PoA and ITI implementation, they do give the impression of a process striving towards ‘coherence, effectiveness and continuity’ (UNGA, 2012a, annexe I, sec. III, first preambular para.).<sup>73</sup>

### **Taking stock of BMS5**

Although they noted a certain lack of ambition, several observers found much to commend in the BMS5 outcome.<sup>74</sup> In fact, a comparison of this text with the outcomes of the Second Review Conference and the preceding BMSs reveals several sources of value added in the BMS5 outcome:

- the promotion of women’s participation and representation in PoA-related policy-making, planning, and implementation processes (UNGA, 2014g, paras. 10, 17d, 31);<sup>75</sup>
- highlighting the potential application of stockpile management to conflict and post-conflict situations, including DDR programmes, UN peacekeeping, and ‘other relevant national programmes’ (paras. 7–8, 17b);
- the articulation of practical steps for the tracing of small arms in conflict and post-conflict situations, building on general language contained in the outcome of the Second Review Conference (paras. 21, 27f–g);<sup>76</sup>
- some acknowledgement of related Security Council work on small arms (paras. 7, 10, 31);<sup>77</sup>
- relatively strong language on international cooperation and assistance, including the identification of specific follow-up;<sup>78</sup>
- a clear mandate for MGE2 (para. 40);<sup>79</sup> and
- an encouragement to improve the utility of national reports on PoA and ITI implementation by using them to identify implementation trends and challenges (para. 49).

Nevertheless, there were some important omissions from the BMS5 text, such as:

- direct references to ammunition, including the International Ammunition Technical Guidelines;<sup>80</sup>
- greater acknowledgement of UN Security Council work on small arms;<sup>81</sup>
- references to the relationship between the PoA and ATT;<sup>82</sup> and
- mentions of ‘security sector reform’<sup>83</sup> and of the International Small Arms Control Standards (ISACS).<sup>84</sup>

At the end of the day, the BMS5 outcome ushers in no normative shifts. For now, the place of ammunition in the UN small arms process remains uncertain, even though the BMS5 text hints that this could change. At the same time, any mention of the connections that exist between the PoA and related Security Council work, or the ATT, remains controversial. More broadly, even though BMS5 mostly managed to build on, rather than repeat, earlier discussions



An officer of the disarmament, demobilization, and reintegration programme of the UN Operation in Côte d'Ivoire (UNOCI) supervises the collection of weapons by UN peacekeepers and the Republican Forces of Côte d'Ivoire (FRCI), Abidjan, February 2012. © Basile Zoma/UN Photo

on stockpile management, the ITI, and international cooperation and assistance, these discussions yielded nothing radically new or different from the PoA and ITI themselves. While that can be seen as a weakness,<sup>85</sup> the action arguably lies elsewhere; the true value of the BMS5 text rests in its enumeration of practical steps that can be taken to advance small arms control in the areas it covered (Marsh, 2014).

This more positive assessment assumes that the measures contained in the BMS5 outcome will be translated into concrete laws, policies, and programmes in the communities, countries, and regions affected by small arms violence. The chapter returns to this question later, in its conclusion, but first focuses on another form of follow-up, namely that which can be conducted in UN meeting halls. As noted above, BMS5 did not consider in any depth the implications of new technologies for ITI implementation, leaving this to the governmental experts who will convene at UN headquarters for MGE2 in June 2015 (UNGA, 2014g, para. 40; 2014h, para. 6). The next section of the chapter, finalized in January 2015, looks ahead to MGE2, examining the subjects with which participants will have to contend at that meeting.

## GETTING TO GRIPS WITH NEW TECHNOLOGIES: MGE2

As noted earlier, the topic of 'recent developments in [small arms] manufacturing, technology and design'—in particular their implications for ITI implementation (UNGA, 2014g, para. 40a)—reaches MGE2 via MGE1, the Second

Review Conference, and BMS5. Two general references in the BMS5 outcome aside (paras. 19–20), only MGE1 has looked at the subject in any detail, focusing on two issues: modular weapons design and the use of polymer in the production of firearms, specifically in handgun frames.<sup>86</sup> Between the time of MGE1, in May 2011, and the publication of the UN Secretary-General's report on the new technologies, in May 2014, another issue had drawn widespread attention, namely the production of firearms using additive manufacturing processes—often known as '3D printing'. The UN Secretary-General's report reviews these three issues, along with a fourth, specifically the use, or potential use, of new technologies for improved small arms control (UNGA, 2014a).<sup>87</sup> The following sections review each of the four issues in turn, drawing, above all, on a Small Arms Survey publication that examines them in greater depth (King and McDonald, 2015).

### Modular weapons<sup>88</sup>

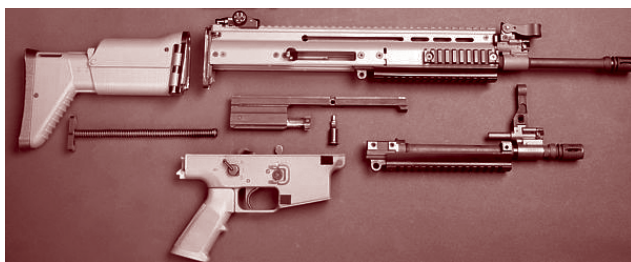
In some countries, the armed forces are now looking to modular rifles as 'all-in-one' replacements for different rifle types and models. Modular rifles typically feature 'split-receiver architecture'. The primary structural component of these rifles, the 'receiver', is divided into an upper and lower receiver. One of these components serves as a core (fixed) section around which most other major parts and components can be changed. In this way, the user, using relatively basic tools and procedures, can reconfigure the rifle to meet different operational needs—changing the calibre or barrel, for example, in order to optimize rifle use in different environments. Operators can also exchange most parts on a modular rifle with parts from the same or related models. To date, designers have adopted different approaches to modularity. 'Full modularity' allows for the complete reconfiguration of a rifle, including a change of calibre. Under the 'family approach', the same model is produced in different versions, each with its own calibre; while the calibre of a specific rifle cannot be modified, other characteristics can be changed (Persi Paoli, 2015b, pp. 24–34).

Although the concept of modularity has gained traction over the past decade among some national armed forces, consideration of its implications for weapons marking, record-keeping, and tracing has lagged behind. The main problem with modular weapons, simply stated, is that the weapon and its major components cannot be clearly distinguished for tracing purposes. The essential first step in tracing any weapon is to uniquely identify it, based on its physical characteristics (make and model) and identifying marks (in particular, serial number). Yet, if the receiver and one or more additional parts of a modular rifle are marked with identifying information—as the ITI prescribes and recommends, respectively<sup>89</sup>—the rifle will usually bear conflicting identifying information (for example, serial numbers) following a change of parts, hampering attempts to uniquely identify it.

A related problem is that, in addition to certain required identifying marks—manufacturer, country of manufacture, and serial number—the ITI also recommends the marking of additional information, such as weapon calibre (UNGA, 2005, para. 8a). It obviously makes little sense to mark a 'fully modular' rifle with a designation of calibre since this can be changed. In short, record-keeping and tracing become more complicated in a fully—or even partially—

modular world. The crucial question is: how can one track a weapon throughout its life cycle, irrespective of changes in its configuration (such as calibre or barrel length)?

Policy options include the identification of a 'control component' for a modular rifle—logically the part around which most other major components can be changed (upper or



A partially-disassembled SCAR-L (Special Forces Combat Assault Rifle). © weaponsman.com

lower receiver). Decisions also have to be taken as to the identifying information to mark on the control component, whether and how other components of the rifle should be marked, and whether and how records associated with the weapon, presumably linked to the control component, should try to account for the weapon's potential configurations.<sup>90</sup> Useful solutions will need to take account of the inherent complexity of modular weapons, while, at the same time, remaining as simple—and practicable—as possible.

### Polymer frames<sup>91</sup>

Gun manufacturers are increasingly using polymers in the production of firearm parts, including the frames of many handguns. The primary reasons for the use of polymers, in place of metal, are the lower weight and cost of polymer parts. Yet, despite these and other advantages, in contrast to metal it is often difficult to mark polymer frames durably, as the ITI prescribes, in order to ensure gun traceability (UNGA, 2005, para. 7).

**It is often difficult to mark polymer frames durably, as the ITI prescribes.**

The ITI leaves the choice of marking methods to national discretion but indicates that:

*States will ensure that, whatever method is used, all marks required under this instrument are on an exposed surface, conspicuous without technical aids or tools, easily recognizable, readable, durable and, as far as technically possible, recoverable (para. 7).*

It further specifies that:

*A unique marking should be applied to an essential or structural component of the weapon where the component's destruction would render the weapon permanently inoperable and incapable of reactivation, such as the frame and/or receiver, in compliance with paragraph 7 above (para. 10).*

Through the use of forensic techniques, markings made on metal can often be recovered following attempts to erase or alter them. This is much more difficult in the case of polymer. Arms traffickers seeking to make a polymer gun untraceable will normally succeed in doing so once they remove the serial number that the manufacturer has applied to the frame. One approach to the problem, used in the United States, is to require manufacturers of polymer frame firearms to embed in the frame a metal tag that is stamped with the weapon's serial number (Persi Paoli, 2015a, p. 13). In practice, however, as some states pointed out at MGE1, criminals intent on preventing the identification of the firearm can often easily remove the tag.<sup>92</sup> An increasing number of manufacturers are, however, embedding the plate in such a way that it can only be pried out by damaging the frame and, as a result, structurally weakening the firearm.

Additional obstacles to the marking of polymer firearms arise after the time of manufacture. Some of the metal tags inserted during production are not large enough to accommodate post-manufacture markings, including import marks. In such cases, the marks have to be made on the polymer frame itself. One advantage of polymer frames is that they can be marked after the time of manufacture without damaging the finish that gun producers often apply to metal firearms. But only a limited number of marking methods can be used to mark polymer, even in a non-durable manner. They include engraving, in particular laser engraving, and, with some limitations, dot-peen (micro-percussion).<sup>93</sup> Laser machines, however, remain relatively expensive, limiting their use in many countries.

As drafted, the ITI takes little account of the specificities of polymer firearms. Guidance is needed on such issues as the use of metal tags, marking methods applicable to polymer firearm parts, and the depth and placement of such markings. International cooperation and assistance, including associated training, will also be important to the broad

diffusion and uptake of technology suitable for the marking of polymer firearms, in particular after the time of manufacture. States could also exchange information on—or collaborate on the development of—new techniques for the recovery of markings removed or altered from polymer parts.<sup>94</sup> The UN Secretary-General's report, along with international guidelines, such as the International Small Arms Control Standards, also present options for meeting the challenges posed by polymer frame guns (UNGA, 2014a; UNCASA, 2012).

### 3D printing<sup>95</sup>

**Hobbyists and others are starting to print firearms from polymer.**

Falling prices, improved technology, and other factors have led to a boom in additive manufacturing ('3D printing') in recent years, at both the industrial and consumer (hobbyist) levels. Industry, including aerospace and defence, is making increasing use of 3D printing due to such advantages as increased speed in the development of designs and prototypes, reduced material use, easier production of complex products, and inexpensive customization. To date, firearm manufacturers have mostly used the technology to produce a range of gun components (such as lower receivers) and accessories (such as sound suppressors). The latter part of 2013, however, saw the printing of the first complete firearm from metal using a high-end 3D printer. Although several examples of this model—the Solid Concepts Inc. 1911—have been sold to the public, it is not commercially viable given its price tag of USD 11,900.<sup>96</sup>

Encouraged by the increased availability of relevant materials, software, and hardware—in particular cheaper, user-friendly printers—hobbyists, craft producers, and small businesses are also starting to print firearms, but from polymer. In early 2013, Defense Distributed produced the first functioning 3D-printed firearm, the 'Liberator' handgun. Except for a metal firing pin and a metal block designed to ensure compliance with minimum metal (detectable firearm) laws in the United States, the original Liberator is made entirely of polymer. Initial models were capable of firing only between 1 and 11 rounds before structural failure occurred, although improved designs were in development as of late 2014.<sup>97</sup>

The advent of consumer-produced 3D-printed guns has attracted considerable attention from policy-makers and law enforcement agencies worldwide. In May 2013, two days after Defense Distributed posted the Liberator design files on its website, the US Department of State directed the firm to remove them, citing a possible violation of US arms export regulations. In 2013–14, several countries introduced legislation that would ban or otherwise restrict 3D-printed firearms or their components. Some legislators have also called for controls on 3D printers, the materials used to produce 3D-printed guns, and associated computer files. Such proposals are problematic, however, as the materials and equipment used to produce 3D-printed firearms are also used to make other 3D-printed products.<sup>98</sup>

In fact, current norms, both national and international, are largely suitable for the control of 3D-printed firearms. National regulations, or provisions in such instruments as the UN Firearms Protocol (UNGA, 2001a), the PoA (UNGA, 2001b), the ITI (UNGA, 2005), and the Arms Trade Treaty (UNGA, 2013a), relating to small arms manufacture, international transfer, and marking, record-keeping, and tracing, would govern 3D-printed guns in the same way they govern traditional firearms. Yet it is often more difficult to apply these norms to 3D-printed firearms. Many of the associated law enforcement challenges stem from the diffusion of increasingly powerful 3D printing technology to individuals and small groups. Criminals and non-state armed groups may find 3D-printed guns attractive since, when unmarked, they are untraceable, and because many security screening devices have difficulty detecting firearms made largely of polymer—although that is not true of the (standard) ammunition they still use. For such reasons, illicit online markets currently sell Liberator-type pistols.

Additional challenges posed by 3D-printed guns include:

- the control of unlicensed production, or production involving shared resources in so-called ‘maker spaces’;
- enforcement of restrictions on the flow of weapons-related information over the Internet;
- the limited application of forensics (ballistics) techniques to some 3D-printed firearms;
- the possible routine destruction of low-cost 3D-printed guns by criminals in order to eliminate evidence; and
- the risk of catastrophic weapons failure (consumer safety).<sup>99</sup>

It seems likely that 3D printing, including for firearms production, will pick up more steam. Current predictions are for further declines in the cost of printers and materials and the increased accessibility of related software and weapons design files. Nevertheless, high-end 3D manufacturing technology—capable of producing complete metal firearms or critical structural components in metal or robust metal–polymer hybrids—will remain the preserve of larger, well-resourced companies for the foreseeable future. This will facilitate law enforcement monitoring of sophisticated 3D-printed firearms production. It will also limit the appeal of 3D-printed guns to criminals and non-state armed groups.

On any current measure of relative cost and performance, firearms produced using traditional manufacturing techniques, including craft firearms, easily best their 3D-printed counterparts. For many years to come, individuals and small groups will continue to confront major hurdles to the production of reasonably effective 3D-printed firearms. These include the cost of suitable printers and materials and the required technical skills. That said, as indicated above, 3D-printed guns already present important law enforcement challenges. Governments, moreover, have a clear interest in preparing for the day when fully functional 3D-printed firearms can be easily and economically produced.

**3D printing, including for firearms production, will likely pick up more steam.**

### **New technologies for improved small arms control<sup>100</sup>**

As indicated in the preceding sections, technologies that are new—or at least new to the firearms industry—including modular design, the use of polymer, and 3D printing—pose certain challenges to the implementation of the PoA and ITI. Nevertheless, as indicated in this section, new or underutilized technologies can also improve marking, record-keeping, and tracing, strengthen stockpile security, and prevent unauthorized use—provided critical barriers to their adoption and diffusion can be overcome and the new technologies can be reconciled with existing multilateral control norms.

New marking technologies, such as data matrix codes and microstamping, coupled with improvements to associated scanning technology, could allow users to instantly capture, store, retrieve, and exchange information about a given weapon. Using these technologies, data that uniquely identifies the weapon, in particular its serial number, could be combined with information about its authorized users and ownership or usage history. This presupposes, however, not only the adoption of the new marking and scanning systems, but also the existence or creation of necessary IT infrastructure.<sup>101</sup>

New technology also offers opportunities for improved stockpile management, including access control, increased data accuracy, and the monitoring and protection of weapons in transit from one location to another. Some of these technologies, such as biometric gun safes, are inexpensive and available to individual gun owners, while others, such as the US military’s Defense Transportation Tracking System, cost many millions of dollars to set up and run. Radio frequency identification (RFID), in particular, could play an important role in improved weapons management and security. Already used in a wide range of commercial and defence applications, RFID tags and strips, coupled with



associated scanners, could be employed, for example, to detect attempts to break a seal on a shipping crate.<sup>102</sup> The transborder application of RFID technology is currently limited, however, due to the use of different RFID frequency bands in different countries (UNGA, 2014a, para. 34).

End-use control is another potential application of new or underutilized technology. Electronically controlled safety mechanisms (ECSMs) may be biometric (such as palm print scanners) or token-based (such as a RFID-tagged wrist watch). They can, for example, prevent a criminal from using a stolen gun—locking it in the absence of the necessary palm print or wrist watch. There is controversy surrounding ECSMs, however, with some observers expressing concerns about their reliability. So far sales of ECSM-equipped firearms have been limited (Schroeder, 2015, p. 83).

There are numerous barriers to the uptake of these new technologies. Foremost among them is cost, including, for many countries, the cost of establishing supporting infrastructure (databases and networked IT). As indicated above, there are also questions about the reliability of some of these technologies, in particular ECSMs, which some fear could prevent the use of a gun by its authorized user when most needed. Additional barriers include the difficulties of sharing information stored in a new format, opposition from political and consumer groups, especially in the United States, the conservative nature of political and military procurement, and the historically slow pace of change in firearms technology.<sup>103</sup> Some technologies, moreover, do not meet the requirements of existing multilateral control instruments.<sup>104</sup>

For all these reasons, 'old' firearms technology is proving surprisingly resistant to the changes that have recently transformed other products and industries. Whatever the future impact of technology on the firearms industry, it is also important to note that the huge number of small arms now circulating in the illicit market, very few of which feature new technology, will define the small arms problem for years to come. Irrespective of the advantages offered by many of the new systems, the same tried and tested methods remain key to small arms control. At the end of the day, the basics of weapons marking, record-keeping, and tracing, stockpile management, and diversion prevention, as

defined in the PoA and ITI, are still essential for all countries, whatever their degree of access to new technology.

That said, as described above and as the MGE2 discussions will undoubtedly show, some new technologies, including modular design, polymer frames, and 3D printing, make implementation of the PoA and ITI more difficult. MGE2 will offer participants an important opportunity to share information and lessons learned in each of these areas, but the long-term value of these discussions will be limited unless states go beyond a review of the new challenges to identify specific, cost-effective ways of meeting them.



A two-dimensional data matrix code. © Traceability Solutions

## CONCLUSION

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A meeting was held, but to what end? BMS5, including its preparatory phase, was characterized by intense diplomatic effort, yet the result is not exactly groundbreaking. The BMS5 outcome document is marred by key omissions, such as a mention of obvious linkages between UN General Assembly (PoA) and Security Council work on small arms, and between the PoA and the ATT. The actual contents of the document—covering stockpile management; marking, record-keeping, and tracing; and international cooperation and assistance—only modestly elaborate on issues already solidly anchored in the text of the PoA and ITI. And some discussions, in particular the implications of recent developments in small arms manufacturing, technology, and design, were deferred to a later date.

One can certainly question the amount of diplomatic effort that went into a meeting outcome that, at some level, is self-evident. Yet that outcome, although unexciting, is in fact useful on several levels. First, compared to the outcomes of previous PoA meetings, the BMS5 text clearly builds on preceding discussions concerning subjects such as women's participation in PoA-related processes, conflict tracing, and international cooperation and assistance. Overall, the document defines a series of basic, practical measures for strengthened PoA and ITI implementation. In addition to those just mentioned, these include ensuring the security of small arms stockpiles in conflict and post-conflict settings, exchanging tracing results and other information in order to identify and reduce diversion risks, and putting more emphasis on training as a means of building sustainable capacity for PoA and ITI implementation (STOCKPILE MANAGEMENT).

Second, the BMS5 outcome makes important connections to other PoA meetings—not only past, but future. Although not really advancing consideration of the question, BMS5 has at least put the issue of new technologies squarely on the agenda of MGE2. As described earlier in the chapter, specific challenges to small arms control efforts arise in at least three new areas: modular weapons design (unique identification and tracing), polymer firearm parts (durable marking), and 3D printing (law enforcement). At the same time, certain new technologies offer opportunities for improved control—at least once critical barriers to their adoption are overcome.

For the moment, the basics of stockpile management, marking, record-keeping, and tracing, and international cooperation and assistance, as defined in the PoA, ITI, and many sections of the BMS5 text, remain essential for all countries, whatever their degree of access to new technology. In that light, one could consider BMS5 and its outcome document, focused on practical implementation measures, a clear success. While this is true when one sets the BMS5 outcome alongside other PoA meeting outcomes, real success will depend on the extent to which the measures contained in the BMS5 outcome are translated into concrete laws, policies, and programmes in the communities, countries, and regions affected by small arms violence. This could include, for example: exposing weaknesses in stockpile management through conflict tracing; exchanging information that alerts export licensing officials to specific diversion risks; and building sustainable capacity for PoA and ITI implementation through training.

Clearly, in order to determine the impact BMS5 will have on the small arms problem, one needs to connect the meeting and its outcome document to real-world change. Yet this is difficult for at least two reasons. First, no mechanism currently allows for a systematic assessment of progress made in implementing the PoA and ITI, let alone progress made in achieving their underlying objectives (curbing small arms proliferation and misuse).<sup>105</sup> Second, even if one could measure changes over time, it may be difficult, or impossible, to attribute them to a particular PoA meeting or even to the PoA itself. Individual governments, NGOs, or regional organizations—or some combination of them—may have a better claim to the observed change.



With assistance from soldiers, a MAG (Mines Advisory Group) team take munitions from an open-air stockpile for destruction, near Goma, DRC, September 2012. © Sean Sutton/Panos Pictures

While the real-world impact of BMS5 may thus remain unclear, the time and expense that went into the meeting can still be justified. In contrast to other arms control processes,<sup>106</sup> the UN small arms process continues to move forward—not by leaps and bounds, but in a relatively practical, focused way. All PoA meetings since BMS3, in 2008, have yielded substantive outcomes.<sup>107</sup> What was implicit (and ignored)<sup>108</sup> in the PoA and ITI—for example, weapons tracing in conflict and post-conflict settings—has been made explicit (and actionable).

Whether action is in fact taken is, of course, the critical question, but the PoA was never meant to be a one-stop solution to the small arms problem. It outlines relevant problems and solutions in agreed language, sets priorities, keeps the issue on national and regional agendas, and presumably helps catalyse practical work. Such work can arise, for example, when NGOs push their governments to follow through on commitments they have made in the PoA or ITI. Admittedly, those commitments tend to be quite modest in nature; as demonstrated at BMS5 itself, the UN small arms process suffers from a lowest common denominator effect. But this is a strength as well as a weakness. As politically binding agreements negotiated within the UN framework, the PoA and ITI apply to all UN member states. In theory, everyone is on board.

So far, not bad. But what has worked reasonably well in the past may not be what is needed in the future. One of the strengths of the UN small arms process to date has been its ability to evolve. The MGE, not mentioned in the text of the PoA or ITI, provides states with an expert-led forum to discuss—and potentially strengthen—implementation of the PoA and ITI.<sup>109</sup> MGE1 helped alert states to new developments in small arms manufacturing, technology, and design that made ITI implementation more difficult in several areas. It will be up to MGE2 to engage with these challenges and indicate how to respond.

Another meeting, then. With perhaps only modest gains to show for the time and effort spent. But such is progress. ▀

## LIST OF ABBREVIATIONS

ATT	Arms Trade Treaty
BMS	Biennial Meeting of States to Consider the Implementation of the Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects
DDR	Disarmament, demobilization, and reintegration
ECSM	Electronically controlled safety mechanism
IANSAs	International Action Network on Small Arms
ISACS	International Small Arms Control Standards
ITI	International Instrument to Enable States to Identify and Trace, in a Timely and Reliable Manner, Illicit Small Arms and Light Weapons
MGE	Open-ended Meeting of Governmental Experts
PoA	Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects
RFID	Radio frequency identification

## ENDNOTES

- 1 Fifth Biennial Meeting of States to Consider the Implementation of the Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects.
- 2 Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects (UNGA, 2001b).
- 3 International Instrument to Enable States to Identify and Trace, in a Timely and Reliable Manner, Illicit Small Arms and Light Weapons (UNGA, 2005).
- 4 See UNGA (2001b, para. IV.1.b; 2012a, annexe I, para. III.1; 2012b, para. 5; 2013b, para. 5). For an overview of the UN small arms process up to the time of the PoA's Second Review Conference, see McDonald (2014).
- 5 See McDonald (2013).
- 6 See also McDonald (2012).
- 7 For more on the interplay of politics and substance (research) in the UN small arms process, see McDonald (2014).
- 8 Simpson took over as ITI moderator in May 2014, replacing Wolfgang Bindseil of Germany, who had begun the work but was unable to continue (Afghanistan, 2014c).
- 9 The dates for BMS5, 16–20 June 2014, were set by UN General Assembly Resolution 68/48 (UNGA, 2013b, para. 5).
- 10 In UN terminology, the phrase 'open-ended' means open to all states. This approach differs from that taken by other UN bodies with more restricted participation, such as groups of governmental experts.
- 11 See UNGA (2005, para. 37; 2012a, annexe I, para. III.3).
- 12 See Afghanistan (2013; 2014a); UNGA (2014b). Agreement on the agenda during the period of informal consultations was 'provisional', pending the formal adoption of the document at the beginning of BMS5. See Afghanistan (2013).
- 13 Ambassador Tanin based these draft versions of the BMS5 outcome on national statements made at the informal consultations, 'working papers', other written inputs countries submitted for BMS5, national reports, and past PoA meeting outcome documents. Afghanistan (2014b).
- 14 On all days of BMS5 except for the last, Ambassador Tanin convened informal consultations in the early morning and evening, and during the day after the completion of formal plenary discussions.
- 15 See IANSAs (2014b, annexe 2); UNODA (n.d.a).
- 16 The statements are available from IANSAs (2014b, annexe 4) and UNODA (n.d.b). See also Goldring (2014).
- 17 Specifically, Mack (2014).
- 18 See Lamb and Mack (2014).
- 19 Among the final sticking points was Egyptian opposition to an 'other issues' section that failed to mention ammunition or 'integrated border control management'—topics it wanted included in the section in order to indicate that, in its view, they were not within the scope of the PoA. See UNGA (2014f, para. 19); Egypt (2014). The 'other issues' section of the outcome document had been used at BMS3 and BMS4 as a dumping ground for subjects states could not agree to integrate into the agreed meeting text, including topics that clearly fell *within* the scope of the PoA but did not figure in the meeting agenda (UNGA, 2008a; 2010a). At BMS5, however, many states expressed reservations about the utility of the 'other issues' section and, as a result, it is much shorter than in the BMS3 and BMS4 outcomes.
- 20 See Endnote 19, above.

- 21 See UNGA (2008a, sec. III).
- 22 Earlier references to 'security sector reform' were dropped in favour of the less specific 'relevant national programmes'. Compare Afghanistan (2014d, paras. 4, 15) with UNGA (2014g, paras. 8, 17b).
- 23 The PoA has quite a lot to say about the application of stockpile management to DDR, however. See UNGA (2001b, sec. II, paras. 21, 29–30, 34).
- 24 See Afghanistan (2014d, paras. 1, 3–4); UNSC (2013, paras. 3, 5, 11, 15). Slightly stronger language can also be found in the BMS3 outcome; see UNGA (2008a, para. 27e). Although not mentioned in the BMS5 outcome, stockpile security is important in preventing the diversion of peace-keeper weapons to insurgents or other unauthorized users. See Berman and Racovita (2013).
- 25 Compare UNGA (2014g, paras. 14, 17g) with UNGA (2008a, paras. 17, 20–23, 27).
- 26 See Gobinet and Van Beneden (2012).
- 27 See UNGA (2008a, paras. 27c–d; 2014g, paras. 12, 17f).
- 28 Examples of qualifiers include 'voluntary application, in accordance with their national legislation' (UNGA, 2014g, para. 12); 'appropriate' (para. 17e); and 'as relevant' (para. 17f).
- 29 See Bastick and Valasek (2014).
- 30 Compare UNGA (2014g, paras. 10, 17d, 31) with UNGA (2012a, annexe I, paras. I.14, II.2.i). Value added in the BMS5 outcome includes the terms 'planning and implementation processes', added after 'policymaking', along with references to Security Council Resolution 1325 (UNSC, 2000) and General Assembly Resolution 65/69 (UNGA, 2010b), which supplement the more generic reference to 'relevant resolutions of the Security Council and the General Assembly', found in the Review Conference outcome (UNGA, 2012a, annexe I, para. II.2.i).
- 31 See UNGA (2008a, sec. III); Bevan, McDonald, and Parker (2009, pp. 136–43).
- 32 See UNGA (2001b, sec. II, paras. 17–19, 21, 29–30, 34; sec. III, paras. 6, 8, 14).
- 33 See Bevan, McDonald, and Parker (2009, p. 141).
- 34 See McDonald (2011, pp. 48–50).
- 35 See Bevan and McDonald (2012, pp. 4–5); McDonald (2013, p. 173); UNGA (2012a, annexe II, para. 2e).
- 36 See Bevan (2009, pp. 109–10); Bevan and McDonald (2012, table 1).
- 37 See UNGA (2012a, annexe II, para. 2e).
- 38 See UNSC (2013).
- 39 See UNGA (2012a, annexe II, para. 2d); McDonald (2013, p. 172).
- 40 See UNGA (2014g, paras. 18, 27a).
- 41 See UNGA (2014g, paras. 21, 25, 27c, 27g).
- 42 See UNGA (2014g, paras. 6, 11, 13, 17a, 18, 27a–c).
- 43 Regarding MGE1, see McDonald (2012, p. 4).
- 44 The UN General Assembly subsequently endorsed this recommendation (UNGA, 2014h, para. 6).
- 45 The UN General Assembly subsequently requested that the Secretary-General report further on the subject as part of his annual report on small arms (UNGA, 2014h, para. 22).
- 46 See UNGA (2005, para. 25).
- 47 See Bevan (2009, pp. 118–20); McDonald (2011, p. 49).
- 48 See UNGA (2005, para. 8b).
- 49 See UNGA (2014b, point 8).
- 50 In the BMS5 outcome's international cooperation and assistance section, see UNGA (2014g, para. 38b). In other sections of the document, see paragraphs 16, 17i–j, 27d, and 27i–k. With regard to BMS5 follow-up, see paragraphs 40c, 41, and 43.
- 51 In the BMS5 outcome's international cooperation and assistance section, see UNGA (2014g, paras. 38b–c, 38e, 38m, 38(n)(ii)). In other sections of the document, see paragraphs 16, 17d, 17g, 17j, and 27i–j. With regard to BMS5 follow-up, see paragraph 40c.
- 52 In the BMS5 outcome's international cooperation and assistance section, see UNGA (2014g, paras. 28, 38a, 38d, 38(n)(i)). In other sections of the document, see paragraphs 15, 17c, 17h, 20, 27d, and 27j. With regard to BMS5 follow-up, see paragraphs 40b–c.
- 53 This is reflected, for example, in the title of the section (UNGA, 2014g, sec. III).
- 54 With respect to the Second Review Conference, see McDonald (2013, p. 170).
- 55 See also paragraph 36 ('reliable and sustained assistance') (UNGA, 2014g).
- 56 See also UNGA (2014g, para. 38f).
- 57 The outcome of the Second Review Conference also addresses the problem, specifically from an armed conflict angle. See UNGA (2012a, annexe I, paras. I.14, II.2.j).

- 58 Note that paragraph 38k reprises, word for word, the provision on border controls agreed at the PoA's Second Review Conference (UNGA, 2012a, annexe I, para. II.3.e).
- 59 This theme figures, in a more general way, in the outcome of the Second Review Conference. See UNGA (2012a, annexe I, para. I.14, II.2.i).
- 60 See McDonald (2013, p. 170).
- 61 See also UNGA (2001b, sec. III, paras. 4, 6, 8, 10).
- 62 See NAM (2014, paras. 6, 8, 9b).
- 63 See Afghanistan (2014d, paras. 52, 61, 64).
- 64 Compare UNGA (2014g, sec. IV) with UNGA (2012a, annexe I, sec. III).
- 65 In addition to BMS5, the schedule includes MGE2 in 2015, BMS6 in 2016, and the Third Review Conference in 2018 (UNGA, 2012a, annexe I, paras. III.1–2; 2014g, para. 39).
- 66 See also UNGA (2012a, annexe I, para. III.5).
- 67 See also UNGA (2012a, annexe I, sec. III, paras. 6–7).
- 68 See also UNGA (2012a, annexe I, paras. I.15, II.4.e, II.5.a, III.8).
- 69 See also UNGA (2012a, annexe I, para. III.10).
- 70 See also UNGA (2012a, annexe I, para. III.9).
- 71 Concerning the lack of formal implementation monitoring for the PoA and ITI, see McDonald (2013, pp. 161–62, 173–74). Paragraph 49 of the BMS5 outcome also recommends the use of national reports 'to enhance the matching of assistance needs with available resources', a point first made in the BMS3 outcome and echoed, to some extent, in the outcome of the Second Review Conference. See UNGA (2008a, paras. 3, 7d, 7i, 27f; 2012a, annexe I, para. II.5.h, annexe II, para. 3h).
- 72 See UNGA (2012a, annexe I, para. III.3).
- 73 See also UNGA (2014g, para. 38e).
- 74 See IANSA (2014a; 2014b); Marsh (2014). A few articles, written in response to BMS5, were more critical in nature, although the criticism stemmed not from the BMS5 text, but rather from flaws that the authors saw in the PoA itself. See Ficaretta and Reeves (2014); Lamb and Mack (2014).
- 75 As noted earlier, this language is stronger than its Second Review Conference counterpart. See UNGA (2012a, annexe I, paras. I.14, II.2.i).
- 76 See UNGA (2012a, annexe II, para. 2e).
- 77 In addition to these explicit mentions of the Security Council, related Council work is referenced indirectly through, for example, language in the BMS5 outcome on DDR and conflict tracing (UNGA, 2014g, paras. 8, 17b, 21, 27f–g). The outcome of the Second Review Conference contains only one explicit mention of the Security Council (UNGA, 2012a, annexe I, para. II.2.i), those of BMS3 and BMS4 none (UNGA, 2008a; 2010a). Both the PoA and ITI, however, refer explicitly to the Security Council. See UNGA (2001b, paras. I.12, II.15, II.32, II.35; 2005, para. 6b).
- 78 See the section on international cooperation and assistance, above. Regarding follow-up in this area, see UNGA (2014g, paras. 27i, 38m, 38(n)(i), 40c).
- 79 The UN General Assembly subsequently confirmed this mandate in its general resolution on small arms (UNGA, 2014h, para. 6).
- 80 References to 'accidents' and 'accidental explosions at depots' (UNGA, 2014g, paras. 6, 11), as well as to 'ballistics information' (paras. 26, 27k), are indirect references to ammunition. For more on these issues, see Small Arms Survey (2014); INTERPOL (n.d.). The International Ammunition Technical Guidelines were developed by the UN Office for Disarmament Affairs pursuant to a UN General Assembly mandate, but their place in the UN small arms (PoA) process is disputed. See UNODA (2011); McDonald (2014, p. 160).
- 81 Because of the opposition of some states, references to Security Council embargoes and to its Resolution 2117 (2013) on small arms were expunged from the final BMS5 text. See Afghanistan (2014d, paras. 1, 4, 6, 44, 72–73).
- 82 The relationship is mentioned only in the 'other issues' section of the BMS5 outcome, which is not part of the agreed outcome (UNGA, 2014g, para. 51d). Some of the states that had taken a sceptical view of the ATT during the negotiations on the instrument, in 2012–13, opposed any mention of the Treaty in the BMS5 text. For more on the ATT's relationship to the PoA and ITI, see Parker (2014, pp. 71–72).
- 83 See Endnote 22, above.
- 84 Although several ISACS modules address BMS5 themes, including stockpile management and weapons marking, record-keeping, and tracing, some states opposed any reference to ISACS in the BMS5 outcome. The ISACS were developed by UN agencies participating in the United Nations Coordinating Action on Small Arms mechanism. See UNCASA (n.d.).
- 85 See Mack (2014).
- 86 See New Zealand (2011, sec. II); McDonald (2012, p. 4).
- 87 The report also reviews the implications of the new developments for international assistance, another topic likely to feature at MGE2.
- 88 This section is based on Persi Paoli (2015b).
- 89 See UNGA (2005, para. 10).

- 90 See Persi Paoli (2015b, pp. 36–41).
- 91 This section is based on Persi Paoli (2015a).
- 92 See McDonald (2012, p. 4).
- 93 See Persi Paoli (2010).
- 94 See Persi Paoli (2015a, pp. 19–20).
- 95 This section is based on Jenzen-Jones (2015).
- 96 See Jenzen-Jones (2015, pp. 52–53).
- 97 See Jenzen-Jones (2015, pp. 50–52).
- 98 See Jenzen-Jones (2015, pp. 62–65).
- 99 See Jenzen-Jones (2015, pp. 62–65).
- 100 This section is based on Schroeder (2015).
- 101 See Schroeder (2015, pp. 76–79).
- 102 See Schroeder (2015, pp. 81–82).
- 103 See Schroeder (2015, pp. 84–88).
- 104 The ITI, for example, specifies that ‘all marks required under this instrument are on an exposed surface, conspicuous without technical aids or tools, easily recognizable, readable, durable and, as far as technically possible, recoverable’ (UNGA, 2005, para. 7). Among others discussed in this section, RFID technology would run afoul of several of these requirements.
- 105 Concerning the lack of formal implementation monitoring for the PoA and ITI, see McDonald (2013, pp. 161–62, 173–74).
- 106 The most egregious example is the Conference on Disarmament, unable to achieve any substantive progress since 1996. See, for example, RCW (n.d.).
- 107 Note that the final product of MGE1, while substantive, was not agreed by meeting participants. The MGE1 chair produced a summary that distils key points from the discussions. See New Zealand (2011).
- 108 With respect to conflict tracing, see Bevan and McDonald (2012).
- 109 See McDonald (2012).
- 110 The author served as an adviser to the BMS5 chair, Ambassador Zahir Tanin. The views expressed in this chapter are the author’s and should not be attributed to Ambassador Tanin or the Government of Afghanistan.

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