

# BOSNIA AND HERZEGOVINA

**ARTICLE 5 DEADLINE: 1 MARCH 2019**  
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## MINE ACTION PROGRAMME PERFORMANCE

For 2016      For 2015

Problem understood	6	6
Target date for completion of mine clearance	5	5
Targeted clearance	7	7
Efficient clearance	6	6
National funding of programme	7	7
Timely clearance	3	3
Land release system in place	7	7
National mine action standards	7	7
Reporting on progress	5	5
Improving performance	6	6
<b>PERFORMANCE SCORE: AVERAGE</b>	<b>5.9</b>	<b>5.9</b>

## PERFORMANCE COMMENTARY

While clearance output dropped slightly in 2016 compared to the previous year, the amount of land reduced by technical survey rose, and the amount cancelled by non-technical survey increased significantly. However, the annual cancellation output reported for 2016, was in part inflated due to the Bosnia and Herzegovina Mine Action Centre (BHMAC) delaying the reporting of data for the European Union (EU) land release pilot project until completion of the project rather than as the work progressed. Notwithstanding this, the results do still reveal use of a more efficient evidence-based land release methodology, which has been piloted over the last few years, and reflected in the three new national standards

adopted in 2016 on non-technical survey, technical survey (including targeted investigation and systematic technical survey), and land release.

Compared to previous years, Bosnia and Herzegovina (BiH) improved its annual reporting on survey and clearance in 2016, and reported more accurately on land release data disaggregated by output (cancellation, reduction, and clearance) and activity (non-technical survey, technical survey, and clearance). However, reports of confirmed hazardous area (CHA) were inconsistent between different forums.

## RECOMMENDATIONS FOR ACTION

- BiH should ensure completion and approval of its National Mine Action Strategy for 2018–25 and a completion plan for mine survey and clearance based on the latest available information, and taking into account implementation of the new land release methodology being rolled out. Periodic revisions should be factored into the strategy. BHMAC and the national authorities should also ensure the timely preparation and submission by the end of March 2018 of BiH's Anti-Personnel Mine Ban Convention (APMBC) Article 5 extension request.
- BiH should implement the recommendations of both the 2015 United Nations Development Programme (UNDP) Mine Action Governance and Management Assessment, and the 2016 performance audit report of the Audit Office of the Institutions of BiH.<sup>1</sup> In particular, BiH should continue reforming and strengthening the governance and management of the mine action programme.
- BHMAC should report more accurately and consistently on the extent of anti-personnel mine contamination, including using the classification of suspected hazardous area (SHA) and CHA in a manner consistent with the International Mine Action Standards (IMAS). It should also ensure that all land released through survey and clearance is entered and reflected in its database in a timely manner.
- BHMAC should operationalise throughout its mine action programme new evidence-based methods of land release, including the use of technical survey with targeted investigation, to more accurately identify and delineate areas of confirmed contamination, and cancel or reduce areas where evidence of mines is lacking.
- BHMAC should ensure the completion of the appropriate standing operating procedure (SOP) on land release and the full implementation of the National Mine Action Standard (NMAS) on land release.
- BHMAC should ensure that operators update their SOPs to reflect new methodologies for land release, including, where appropriate, for technical survey with targeted investigation.
- BHMAC should ensure that operators report consistently on outputs using the new land release methodologies.
- The BiH Armed Forces, the Federal Administration of Civil Protection, and the Civil Protection Administration of Republika Srpska should be provided with the necessary demining equipment, in a timely manner, to facilitate the full and efficient deployment of their respective demining capacities.

## CONTAMINATION

BiH is heavily contaminated with mines and explosive remnants of war (ERW), including cluster munition remnants (CMR), primarily as a result of the 1992–95 conflict related to the break-up of the Socialist Federal Republic of Yugoslavia.<sup>2</sup> Most mined areas are in the zone of separation between BiH's two main political entities – the Federation of Bosnia and Herzegovina (FBiH) and Republika Srpska (RS). Twenty years after the end of the conflicts, BiH is still the most heavily mined country in Europe.

BHMAC has reported different figures for its estimate of mine contamination as at the end of 2016.<sup>3</sup> In its latest APMBC Article 7 transparency report, BiH states that a total of 1,091km<sup>2</sup> of area was suspected to contain mines, across 8,636 locations, of which it estimated that 315.75km<sup>2</sup> of area was more likely to contain mines, across 4,286 "locations".<sup>4</sup>

BiH's statement on Article 5 implementation at the June 2017 APMBC intersessional meetings only references the 1,091km<sup>2</sup> of suspected mined area (representing 2.2% of the total area of BiH), does not reference the area within this total, which is estimated to contain mines.<sup>5</sup> The 23.46km<sup>2</sup> of CHA reported to Mine Action Review in Table 1 represents the surveyed tasks within the overall 1,091km<sup>2</sup>, which are ready for clearance.<sup>6</sup>

**Table 1: Anti-personnel mine contamination by canton (as at end-2016)<sup>8</sup>**

Canton	SHAs	Area (km <sup>2</sup> )	CHAs*	Area (km <sup>2</sup> )
Unsko-Sanki	587	106.33	134	2.80
Posavski	192	19.41	13	0.60
Tuzlanski	674	81.28	70	1.97
Zanicko-Dobojski	750	125.36	50	1.55
Bosansko-Podrinjski	281	50.69	22	0.95
Srednje-Bosanski	856	129.77	109	3.39
Hercegovacko-Neret	1,187	155.78	70	2.73
Zapadno-Hercegovacki	6	0.31	3	0.23
Sarajevo	290	74.25	42	1.13
Canton 10	584	88.83	35	1.0
<b>Subtotal BiH Federation</b>	<b>5,407</b>	<b>832.01</b>	<b>548</b>	<b>16.35</b>
Republika Srpska	3,093	242.99	325	6.89
Brčko district	138	16.23	6	0.22
<b>Totals</b>	<b>8,638</b>	<b>1,091.23</b>	<b>879</b>	<b>23.46</b>

\* The data reported on CHA is included within the overall SHA, and is not in addition to the SHA.

BiH has suggested that 73,483 mines and items of unexploded ordnance (UXO) remain to be cleared.<sup>9</sup>

The number of "minefield" records was reported to total 19,283, of which 13,672 were in the Federation of BiH, 4,858 in Republika Srpska, and 753 in Brčko District. Collection of minefield records is ongoing, with BHMAC estimating that it has collected around 70% of the total.<sup>10</sup> It is unclear to what extent the 19,283 minefield records include areas already released through survey and clearance operations, but which incorrectly remain in the database as mined areas.

A 2016 national audit office report on the efficiency of the demining system in BiH concluded that: "Twenty years after the war ended, the Mine Action Centre still does not have complete information on the locations of landmines in BiH, which is to say it does not know the total suspected hazardous area."<sup>11</sup> Similarly, a 2015 UNDP evaluation reported that BHMAC is aware that not all of the SHA is actually mined, but "without more efficient non-technical survey and technical survey procedures the exact extent of the problem cannot be quantified."<sup>12</sup>

As at May 2017, plans were being discussed between BHMAC, clearance operators, and the EU, regarding a potential country re-assessment (re-survey) to establish a more accurate baseline of mine-contamination and improve the efficiency of demining operations. Data from this would also be used to feed into periodic revisions of BHMAC's completion plan (see the Strategic Planning

Either way, this represents a decrease in overall mined area, compared to the 1,149km<sup>2</sup> of SHA and 300km<sup>2</sup> of CHA and as at the end of 2015, as reported by BiH in its Article 7 report the previous year,<sup>7</sup> or the 1,149.9km<sup>2</sup> of SHA and 23.04km<sup>2</sup> of CHA reported to Mine Action Review for 2015.

section, below).<sup>13</sup> As at September 2017, a project proposal for the country re-assessment had been submitted to the EU for consideration.<sup>14</sup>

According to BiH, mined areas are located in 129 municipalities/cities, with 1,389 communities/populated areas contaminated. Mine and ERW contamination directly impacts the safety of approximately 545,000 people, or 15% of the population of BiH, based on the last census in 2013.<sup>15</sup> Of the total SHA, 62% is forested, 26% agricultural land, and 12% infrastructure.<sup>16</sup> Much of the remaining mine contamination in BiH is comprised of individually placed mines or groups of mines, which do not follow a set pattern, and which were emplaced across a wide area, posing a challenge to the identification of the location of contamination.<sup>17</sup> Furthermore, physical changes to mined areas, such as in vegetation, and a lack of witnesses to the laying of the mines, pose additional challenges.<sup>18</sup> Mine contamination is said also to obstruct the return of refugees and the displaced; impede rehabilitation and development of utility infrastructure; and prevent free movement between communities, especially on the administrative line between the entities.<sup>19</sup>

BiH was severely affected by the Balkan flood disaster in May 2014, which reminded the international and local community of the task of mine clearance that still remains in BiH, and emphasised the need to push for a non-stagnated mine action sector.<sup>20</sup> The European Union (EU)'s 2014 Flood Recovery Needs Assessment for BiH found that while minimal mine mitigation was needed

compared to that expected, mines and UXO remain a risk in human, economic, and social terms and should be addressed as a priority.<sup>21</sup> The EU Needs Assessment recommended that BHMAC consider the possibility that landslides may have buried landmines deeper than the 10cm to 20cm currently investigated in clearance efforts.<sup>22</sup> The assessment identified key priorities and tasks for mine action to aid the recovery.<sup>23</sup>

The fertile agricultural belt in the Posavina region, along with the Doboj region, has the most heavily contaminated areas.<sup>24</sup> According to BHMAC, however, most mine incidents now occur in forested areas.<sup>25</sup> In 2016, four mine-related incidents were recorded, resulting in four fatalities and three injuries, all of whom were adult males.<sup>26</sup> This is an increase compared to 2015, when only one mine-related incident was recorded, resulting in a fatality.<sup>27</sup>

## PROGRAMME MANAGEMENT

The Demining Commission, under the BiH Ministry of Civil Affairs, supervises the state-wide BHMAC and represents BiH in its relations with the international community on mine-related issues.<sup>34</sup> The Demining Commission is composed of representatives from three ministries (Civil Affairs, Security, and Defence) elected from the three constituent “peoples” of BiH and representing BiH’s three majority ethnic groups (Bosniaks, Croats, and Serbs).<sup>35</sup> Three new Demining Commission members were given a two-year mandate on 23 July 2015,<sup>36</sup> which expired in July 2017. A new Demining Commission was expected to be appointed in the near future, and in the interim, the current representatives will serve as an “acting” Demining Commission.<sup>37</sup> Whereas the Minister for Civil Affairs remains ultimately responsible for mine action, the Demining Commission represents the strategic body responsible for setting mine action policy, and it proposes the appointment of BHMAC senior staff, for approval by the Council of Ministers.<sup>38</sup> One problem posed by the structure of the Demining Commission is that each of the three represented ministries has separate portfolios in their respective ministries; and their work on the Demining Commission is only part-time in addition to their other responsibilities.<sup>39</sup> Furthermore, according to the 2016 audit office report, “The Commission has not developed a methodology on how to monitor the work of the BHMAC”.<sup>40</sup>

BHMAC, established by a 2002 Decree of the Council of Ministers, is responsible for regulating mine action and implementing BiH’s demining plan, including accreditation of all mine action organisations.<sup>41</sup> BHMAC operates from its headquarters in Sarajevo, two main offices in Sarajevo and Banja Luka, and eight regional offices (Banja Luka, Bihać, Brčko, Mostar, Pale, Sarajevo, Travnik, and Tuzla).<sup>42</sup>

A November 2016 national audit office report on the efficiency of the demining system in BiH concluded that: “The institutions of BiH have not undertaken all activities required to ensure efficiency of the demining system. A conclusion can be drawn that BiH is not committed to dealing seriously with the demining problem, which jeopardises the implementation of the

Of the mine-related incidents in 2016, in May, a man was killed by a PROM-1 while collecting firewood in the municipality of Jajce.<sup>28</sup> On September 1, a forestry worker was killed, and two others injured, by an unknown explosive device in Veseoski Podovi, while preparing wood for cutting in Bugojno municipality.<sup>29</sup> This incident reportedly took place in an area not declared or marked as contaminated.<sup>30</sup> On September 18, a man was killed by a PROM-1 mine while hunting in Mitrovica Gvozd, Livno municipality.<sup>31</sup> On 7 November, a shepherd was killed and another person injured by a PROM-1 mine, in Čardak-Tramošnica Donja, in Pelagićovo municipality. This incident also took place in an area which was not declared or marked as contaminated,<sup>32</sup> but such incidents are unusual in BiH.<sup>33</sup>

BiH strategic goals and the fulfilment of international commitments assumed. The demining process has neither been analysed nor improved systematically in the past 15 years”.<sup>43</sup> This mirrors some of the strong criticism of BHMAC’s governance and management prior to 2015, (see “Clearing the Mines 2015” report on BiH). However, reforms are now being implemented, under the leadership of a new acting director of BHMAC, who was appointed on 22 September 2015 by the Council of Ministers.<sup>44</sup> The Demining Commission has drafted an Action Plan to address the recommendations of the 2016 audit office report, and as at September 2017 the status of the Action Plan was unclear.<sup>45</sup>

In its 2015 revision of the National Mine Action Strategy for 2009–19, BHMAC stated that one of its goals was to “organize regular meetings for Board of Donors in order to present the results and to ensure and increase trust and support of donors”.<sup>46</sup> After a 10-year hiatus, Board of Donor meetings resumed in September 2015,<sup>47</sup> and a second meeting took place in March 2016.<sup>48</sup> As the Board of Donors is one of the few platforms where international actors meet formally under law, international donors in BiH welcomed the resumption of the meetings, which provide a forum for improved coordination and communication with the national authorities.<sup>49</sup> As at September 2017, however, no further Board of Donor meetings had taken place since the March 2016 meeting.<sup>50</sup> This is an issue that the national authorities, and fellow co-chair of the board UNDP, should address if the Board is to serve as a meaningful forum in which to enhance coordination and better engage donors.

In May 2016, moves were made to reinstate expert working groups (EWGs), which used to meet until 2009, helping to address issues such as quality control (QC).<sup>51</sup> According to BHMAC, the EWGs, which were re-established in October 2016, will meet as often as needed.<sup>52</sup> One EWG meeting was held in 2016.<sup>53</sup> The BiH Armed Forces think the EWG would benefit from regular, quarterly meetings.<sup>54</sup> As at June 2017, UNDP reported that it was planning to organise EWGs in coordination with BHMAC.<sup>55</sup>

## Strategic Planning

BiH is currently working on a new National Mine Action Strategy for 2018–25, with support from the Geneva International Centre for Humanitarian Demining (GICHD), which addresses all contamination, including anti-personnel mines. The BiH Mine Action Strategy for 2009–19, adopted by the Council of Ministers in 2008,<sup>56</sup> sets the target of the country becoming free of mines by 2019. BHMAC conducted the first of three planned revisions of the strategy in 2012–13<sup>57</sup> (the other two were due in 2015 and 2017, respectively).<sup>58</sup> The 2012 revision asserted lack of funding as one of the major reasons for BiH's slow progress to completion of its clearance goals.<sup>59</sup> The revised strategy was not formally adopted by the Council of Ministers, highlighting the lack of political attention to mine action in BiH.<sup>60</sup>

In April 2015, while revision of the second strategy was ongoing, BHMAC stated that it could provisionally report that, after six years, only half of the strategy's scope had been implemented, primarily due to lack of funding for humanitarian demining.<sup>61</sup> The funding shortfall resulted in part from a failure to secure funds for demining from additional government sources. Local NGO representatives expressed concern in March 2015 that civil society involvement in the strategy revision had, so far, been limited.<sup>62</sup> A representative of the EU said they were sceptical that the 2015 revision would be meaningful, but noted pressure from the international community to improve on previous strategic planning processes.<sup>63</sup> The second revision of the BiH Mine Action Strategy 2009–19 was completed in 2015,<sup>64</sup> in consultation with the Demining Commission and UNDP.<sup>65</sup> Among the strategic and operational goals in the revised strategy, was to eliminate one third of the total suspected mined area in BiH through non-technical and technical survey, by the end of 2019.<sup>66</sup> The operational plan in the 2015 revision also envisaged that over the next two or three years all organisations would transition to conform to the new land release methodology.<sup>67</sup> The revision was endorsed by the Demining Commission in BiH in March 2016, but was not adopted by the Council of Ministers.<sup>68</sup>

The third revision of the strategy was due to be concluded by the end of 2017, and in 2016, BHMAC, in consultation with the GICHD, started the revision process. However, instead of revising the existing Mine Action Strategy 2009–19 (revision II, with proposed amendments), BiH, with support from the GICHD, is producing a new national mine action strategy for the period through to projected completion of mine and CMR clearance (2018–2025).<sup>69</sup> As part of this process, an initial workshop was held in November 2016, followed by a second workshop on "Bosnia and Herzegovina National Mine Action Strategy Working Group Sessions", organised by BHMAC and the GICHD, with the participation of relevant government ministries, clearance operators, and other stakeholders, took place in Sarajevo in February 2017.<sup>70</sup>

The new strategy, which has been prepared with support from the GICHD, was due for completion by the end of 2017, and will contain a general plan and timeframe for the completion of mine clearance, as well as for CMR.<sup>71</sup> The new strategy will also include a section on management of residual contamination and national capacities, after clearance of all contaminated areas is completed.<sup>72</sup> The new strategy, will be presented to the government as a suggested format and timeframe for completion of mine and CMR clearance in BiH, to be managed and implemented by the national authorities. In June 2017, BiH reported that it was in the process of defining the final steps of the new strategy,<sup>73</sup> and on 13 September 2017, a meeting was held with between BHMAC, the Demining Commission, the GICHD, and UNDP, during which the draft strategy was presented and comments provided. The draft strategy was then shared with the BiH Armed Forces, the entity Civil Protections, UNDP, and the EU for further comment.<sup>74</sup> The strategy was due to be completed in October, after which it will be referred to the Council of Ministers for adoption.<sup>75</sup> In addition, the Demining Commission and BHMAC will produce an action plan and financial plan for the strategy (2018–25).<sup>76</sup>

In order to improve efficiency and effectiveness, BHMAC began to implement more efficient land release methodology in 2014, with the realisation of the "IPA 2011 Land Release" project, funded by the EU.<sup>77</sup> Land release operations under the EU pilot project finished in 2016, and the project officially ended in March 2017.<sup>78</sup> It is hoped that the new land release concept, which prioritises survey across multiple land release pilot projects and beyond, will greatly speed up release of suspected mined area.<sup>79</sup> The new methodology, and its envisaged impact on annual output rates for survey and clearance, will also be factored into BiH's National Mine Action Strategy for 2018–25.

Donors are hoping that the strategy will contain clear, realistic indicators and milestones, and incorporate up-to-date land release methodologies.<sup>80</sup> BHMAC has reported that it intends to factor at least two revisions into its new mine action strategy, to help monitor progress and ensure it remains valid.<sup>81</sup>

As at May 2017, plans were being discussed for a potential country-wide re-assessment (re-survey), to establish a more accurate baseline of mine-contamination.<sup>82</sup> The proposed non-technical survey would include desk studies, analysis of war maps, and other materials, and would focus on finding evidence of mines, including analysing evidence of cases in which mines have been removed by locals in the intervening years since the end of the conflict.<sup>83</sup> It is envisaged that the re-survey would take approximately two years and data obtained during the process will help inform periodic revisions to BHMAC's completion plan.<sup>84</sup> The proposed re-assessment will also include components of impact assessment, as the initial survey results date back many years and there is the need to re-determine the current impact of mine contamination.<sup>85</sup> As at August 2017, BHMAC, NPA, and the BiH Armed Forces' Demining Battalion, were looking to work together for the re-survey process,<sup>86</sup> and as at September 2017, a project proposal had been sent to the EU.<sup>87</sup>

Results of mine action in BiH show that the applied land release model was efficient in the period 2005–09, and prior to 2009, BHMAC cancelled significant amounts of land annually through non-technical survey.<sup>88</sup> There remains significant potential for further reduction in the size of the SHA. However, this will require strong implementation oversight by BHMAC and dedicated efforts and improved survey techniques to obtain additional information on mine contamination.<sup>89</sup> It will also require supplementing and combining non-technical survey with the use of technical interventions to confirm or deny the presence of mine contamination in SHAs.<sup>90</sup> BiH's plan is to achieve this through enhanced technical survey methodology, including where possible, the use of technical survey with "targeted investigation" (also referred to as targeted technical survey), alongside the more traditional systematic technical survey approach, to more accurately determine the location of the confirmed mine contamination.<sup>91</sup>

The application of targeted investigation was part of the original EU Land Release pilot project, and the concept was subsequently trialled and adopted more widely in BiH. Technical survey with targeted investigation was piloted by Norwegian People's Aid (NPA) in 2015, and has subsequently been expanded and implemented by other operators and state bodies, including the BiH Armed Forces and civil protection entities. The process consists of first applying elements of non-technical survey, including desk studies and collection of evidence of contamination. Field-based targeted investigations are then conducted, and the outputs analysed to assess any CHA identified. As part of this process, BHMAC and NPA identified new sources of information for inclusion, including from former soldiers and commanders, and members of the local population who provided valuable data on mine contamination. Several methodologies can then be applied as part of the technical survey to locate the target contamination, including the use of manual clearance lane(s) towards a specific target, the use of detection dogs to search for a specific target, or the use of drones to help identify a specific target. Selection of techniques for each target is guided by several factors, including analysis of the characteristics of indirect evidence examined and environmental conditions (including the type of terrain and density of vegetation).<sup>92</sup>

In March 2017, NPA and BHMAC jointly organised a three-day workshop on the results of application of technical survey with targeted investigation in BiH in 2016. The workshop included a technical component during which the BiH Armed Forces, the Federal Administration of Civil Protection, the Civil Protection Administration of Republika Srpska, Pro Vita, NPA, and BHMAC, collectively discussed experiences gained through implementation of the technique, quality management in land release operations, and prioritisation. The results of the workshop were then presented to donors and other mine action stakeholders from the region.<sup>93</sup>

There is broad agreement that technical survey with targeted investigation could significantly improve the efficiency of land release in BiH.<sup>94</sup> It is hoped that targeted investigation could more accurately define CHA, and reduce the area treated through clearance to between 1% and 3% of the original SHA.<sup>95</sup>

In May 2017, BHMAC asked NPA to develop a planning tool for land release. The tool is based on indicators of productivity, resources, and successful land release. It supports implementation of the national mine action strategy and monitoring of BiH's mid-term land release action plans. On 22 August 2017, the tool was presented during a meeting of the BiH Land Release Board, together with representatives from the UNDP and EU delegations in BiH. The National Land Release Board is comprised of BHMAC, the BiH Armed Forces, the civil protection entities of the Federation of BiH and of the Republika Srpska, and NPA serves as an advisor to the board.<sup>96</sup> As at September 2017, the plans and timeline for assessing and/or adopting the planning tool had not been announced.

Mine action prioritisation and planning in BiH is based on socio-economic impact. However, a UNDP evaluation recommended that the system be reviewed to reflect changing circumstances as well to take account of the specific impact of particularly dangerous mines such as the PROM-1.<sup>97</sup> BHMAC conducted a general assessment in 2016 to help designate high, medium, and low impact SHAs.<sup>98</sup>

## Legislation

Since 2008, efforts have been made to adopt new mine action legislation in BiH with a view to creating a stable platform for mine action funding by the government and local authorities. A new draft demining law, which was first submitted to parliament in 2010, had still to be approved as at September 2017. It has not received approval from the Council of Ministers,<sup>99</sup> after which it must be sent for parliamentary approval. The last attempt to amend the law took place in the second half of 2015 and the draft Bill failed to attract the support of the Council of Ministers, which concluded that instead of adopting a new law, the existing law on demining should be amended.<sup>100</sup>

BiH demining authorities are following the recommendation to amend the existing law, but as such is restricted to the number of changes it can include, as amendments are not permitted to exceed 40% of an original Act or else a new law is needed.<sup>101</sup> In August 2016, the 68th session of the Council of Ministers of BiH issued a "Decision of the establishment of working group for the design of changes on the Demining law in BH".<sup>102</sup> The working group, which consisted of representatives from the Ministry of Civil Affairs, the Demining Commission, BHMAC, the Armed Forces, and the entity Civil Protections, created a first draft of the amended demining law,<sup>103</sup> which as at September 2017 was still under consideration.<sup>104</sup>

In December 2016, the Ministry of Civil Affairs of BiH opened a short 16-day public consultation process on Draft of Law on Amendments to the Law on Demining in BiH in accordance with the rules for consultations in drafting legal regulations in institutions of BiH.<sup>105</sup> As at June 2017, the public consultation had been completed, and the draft law sent, via the Ministry of Civil Affairs, to the Council of Ministers for adoption.<sup>106</sup>

UNDP has highlighted the need for the existing draft to be amended to ensure a strategic management body exists for mine action; that BiH national standards on land release are referenced; and that no technical issues impede land release.<sup>107</sup>

A BHMAC official acknowledged that the lack of a new legal framework has contributed to BiH's repeated failure to meet its funding targets under its own mine action strategy.<sup>108</sup> Nevertheless, the UNDP 2015 evaluation stated that though a more robust legal framework for mine action in BiH would be welcome, the current demining law is adequate to enable mine action activities to be implemented effectively.<sup>109</sup>

## Standards

In December 2012, having recognised the need for more efficient land release in BiH, the EU, with pre-accession funding, started a pilot "Land Release" project with BHMAC.<sup>110</sup> As part of this project, and by order of the Demining Commission, BHMAC developed three new draft chapters of its mine action standards in 2013. After discussion within the demining community in BiH, the draft standards were adopted by the Demining Commission in 2014, when operational activities commenced on the pilot projects.<sup>111</sup>

Subsequent lessons learned from conducting non-technical survey, technical survey (including targeted investigation), and mine clearance during the pilot projects, resulted in BHMAC amending the three standards in 2015, in accordance with IMAS.<sup>112</sup> The revised national standard chapters were drafted in cooperation with EU technical assistance through the Land Release pilot project, UNDP, and the GICHD.<sup>113</sup> After public debate and feedback from demining organisations and other mine action stakeholders, the three new chapters of the national mine action standards (NMAS) were adopted by the Demining Commission on 27 January 2016.<sup>114</sup> The Demining Commission adopted temporary guidelines for QA/QC for land release tasks in July 2017.<sup>115</sup>

In addition, BHMAC has begun amendments and annexes for all chapters of the NMAS, as well as for SOPs for humanitarian demining.<sup>116</sup> NPA piloted SOPs for technical survey with targeted investigation as the "missing link" in BiH's land release process and proposed to BHMAC to consider the finalisation and adoption of these SOPs.<sup>117</sup> In 2016, in collaboration with the GICHD and UNDP, BHMAC held a workshop on "standards and SOP revisions".<sup>118</sup> In order to further optimise efficiency and effectiveness, and ensure that the standards and SOPs allow for the optimal release of land through survey, including by technical survey, BHMAC created four expert working groups in 2016, to work on amendments and additional to all the chapters of the national mine action standards and SOPs.<sup>119</sup> The working groups expected to complete their work by the end of September 2017, after which recommendations were to be sent to the demining commission for adoption.<sup>120</sup>

## Quality Management

BHMAC'S two main offices in Banja Luka and Sarajevo coordinate the activities of regional offices in planning, survey, and quality control/QA. QA inspectors are based in the regional offices.<sup>121</sup>

The 2015 UNDP evaluation found that BHMAC's QA of demining activities functions well, but recommended that BHMAC develop effective quality management mechanisms for the whole organisation to make processes more efficient and transparent.<sup>122</sup> However, the 2016 national audit office report found that the quality control of demining carried out by BHMAC is not efficient and that a systematic improvement of the quality control (QC) process has never been done. In addition, the report states that: "Despite several levels of control in the demining system, accidents and irregularities occur in the areas the BiH Mine Action Centre declared safe".<sup>123</sup> In the report, "accidents" refer to blasts during demining activities and in areas that have been cleared and released; and "incidents" refer to mines and items of UXO detected in cleared areas after the completion of works and after the QC certificates had been issued by BHMAC. According to the audit office report, 23 irregularities and 32 accidents occurred between 2005 and 2016. Of the 32 accidents, 29 occurred during demining while the remainder involved civilians after demining had been completed.<sup>124</sup> The Director of BHMAC, however, confirmed in May 2017 that no irregularities or accidents on cleared/released land have occurred in the last two years.<sup>125</sup>

Five decisions requiring repetitions of technical survey operations were issued during clearance and technical survey operations in 2016, in addition to six withdrawals of authorisation, and one resolution on prohibition of further work.<sup>126</sup>

It is important that appropriate QA and QC procedures are in place for all elements of land release methodology, including QC for survey.

## Operators

At the end of 2016, 26 organisations were accredited for mine action in BiH: four government organisations (Armed Forces of BiH, Federal Administration of Civil Protection, Civil Protection Administration of Republic of Srpska, and Brčko District Civil Protection), the Red Cross Society of BiH, nine commercial companies (eight national and one international), and twelve non-governmental organisations (NGOs) (ten national and two international).<sup>127</sup> Overall demining capacity totalled 1,200 persons in accredited organisations, comprising 900 deminers and 300 others (including team leaders, site leader, operational officers, quality assurance (QA) officers, and dog trainers).<sup>128</sup>

During 2016, technical survey and/or clearance of anti-personnel mines was conducted by the BiH Armed Forces, the Federal Administration of Civil Protection, the Civil Protection Administration of Republic of Srpska, and thirteen other clearance organisations, comprising nine NGOs (DEMIRA, Dok-ing deminiranje N.H.O., Eko Dem, Centre of Mine Detection Dogs (MDDC), NPA, Pazi Mine, Pro Vita, Stop Mines, and Association UEM) and four commercial organisations (Detektor, N&N Ivsia, Point, and UEM).<sup>129</sup> BHMAC did not expect any major changes to demining capacity in 2017.<sup>130</sup>

The governmental operators – Civil Protection teams and the BiH Armed Forces' Demining Battalion – constitute about 60% of the available operational capacity in BiH, though their total output in terms of land released by clearance and technical survey is proportionately much less.<sup>131</sup> The general view is that the BiH Armed Forces and Civil Protection are both good partners, and have effective capacities, but have suffered from logistical challenges and equipment deficits, which prevent them from working at full capacity.<sup>132</sup>

The BiH Armed Forces survey and clearance operations are fully engaged from March to November, and with reduced activity, predominantly in southern BiH, from December to February.<sup>133</sup> In 2017, the BiH Armed Forces planned to undertake 56 demining projects: 34 in the Federation BiH, 18 in Republika Srpska, and 4 in District Brčko. Of the 56 planned projects, 6 were related to landmine clearance, 36 to technical survey, 4 to targeted technical survey, and the remaining 10 to CMR clearance. The BiH Armed Forces deploys machinery and explosive detection dogs during its survey and clearance operations.<sup>134</sup> They do, however, require ongoing support from external partners, such as NPA (with international funding from governments of Germany, Norway, the Netherlands, and Switzerland, in addition to the Digger Foundation), to secure personal protective equipment, batteries for detectors, and fuel for demining machinery, since the Army's own complex procurement system often cannot deliver such items in sufficient time.<sup>135</sup>

Since 2010, NPA has increasingly focused on building the capacity of the Demining Battalion.<sup>136</sup> This involves transfer of knowledge through operational planning of clearance and technical survey operations; direct operational support; and provision of mine detection dogs (MDDs) and equipment, among other things.<sup>137</sup> The Demining Battalion also receives support from Austria, France, Italy, and the United States, as well as EUFOR, which alone provides 90% of support.<sup>138</sup>

Furthermore, both the BiH Armed Forces and Civil Protection entities suffer recruitment challenges, but of a differing nature. Deminers in the BiH Armed Forces are forced to stop demining at the age of 38 (this upper limit, until recently, had been 35). This results in experienced deminers being forced to retire and, as a result, a high turnover of deminers.<sup>139</sup> The Federal

Administration of Civil Protection on the other hand, is unable to employ new staff, including deminers, as this is a Federal Government decision. Therefore, the capacity of the Federal Administration of Civil Protection has been reduced as pensioned deminers or those absent due to sickness have not been replaced.<sup>140</sup>

The 2015 UN assessment recommended that BHMAC involve the BiH Armed Forces and Civil Protection teams more in conducting non-technical survey, technical survey, and clearance tasks, as part of the land release process.<sup>141</sup> In the opinion of a UNDP expert, the BiH Armed Forces have sufficient demining equipment, but could benefit from stronger management and better oversight of demining operations.<sup>142</sup>

NPA is, according to the 2015 UNDP evaluation, well respected and credible in BiH and is treated almost like a national asset, even though it is international and independently funded through committed donor support.<sup>143</sup> Both machines and dogs are integrated into NPA demining operations in BiH. Machines are used for mechanical ground preparation, but much of the remaining mined area is in hilly or mountainous terrain, which restricts the use of machinery. MDD and special detection dogs (SDDs) are used for clearance and technical survey tasks, including targeted technical survey.<sup>144</sup> NPA planned to expand the use of SDDs equipped with MDD harnesses, called the SMART system.<sup>145</sup> NPA also supports BHMAC with non-technical survey, and has one non-technical survey team seconded to BHMAC.<sup>146</sup> NPA further conducts mine clearance in the Srebrenica region in support of the activities of the International Commission for Missing Persons.<sup>147</sup> As mentioned above, since 2010, NPA has increasingly focused on building the capacity of the Demining Battalion.<sup>148</sup> NPA expected to maintain the same level of funding in 2017.<sup>149</sup>

Mines Advisory Group (MAG) received operational accreditation in April 2017, and began technical survey and clearance operations in May 2017, with funding from the governments of Austria and the United States.<sup>150</sup>

With the exception of MAG and NPA, clearance operators in BiH typically compete for international tenders in order to secure their funding. The UNDP evaluation suggested that this left much capacity underused and recommended alternative contracting models more appropriate for land release (either by having longer term contracts or being contracted for the clearance of larger areas), which could be more attractive to the demining organisations in terms of security and could also make best use of capacity in the long run.<sup>151</sup> National demining NGOs, such as STOP Mines or PROVITA, which are registered in a similar way to companies, potentially have capacity to quickly mobilise additional resources and up-scale operations.<sup>152</sup>

## LAND RELEASE

In 2016, BiH released 1.34km<sup>2</sup> by clearance and 10.39km<sup>2</sup> by technical survey. A further 46.94km<sup>2</sup> was cancelled.<sup>153</sup> While clearance output dropped slightly compared to the 1.64km<sup>2</sup> cleared in 2015, the amount of land reduced by technical survey and cancelled by non-technical survey in 2016 rose significantly, compared to the 8.39km<sup>2</sup> reduced and 16.17km<sup>2</sup> cancelled in 2015.<sup>154</sup> However, as mentioned below, the 2016 survey output was inflated as the area reported as released by survey and clearance, including as cancelled by non-technical survey, includes the results of the EU pilot project over three and a half years, and not just in 2016.<sup>155</sup>

### Survey in 2016

In 2016, 10.39km<sup>2</sup> was reduced by technical survey across 183 tasks and 46.94km<sup>2</sup> was cancelled by non-technical survey (see Table 2 below).<sup>156</sup> The figure of 46.94km<sup>2</sup> reported as cancelled by non-technical survey, however, included the results of the full three and a half-year EU pilot project, rather than the annual cancellation output for 2016.<sup>157</sup> This was likely due to a delay in sign off of the results of the EU pilot project, and subsequent delay in entry into the database, due to QC considerations.

In addition, 75 SHAs totalling 1.3km<sup>2</sup> were confirmed as mined.<sup>158</sup>

Technical survey was conducted by the BiH Armed Forces, the Federal Administration of Civil Protection, the Civil Protection Administration of Republika Srpska, and thirteen other clearance organisations (see the Operators section, above).<sup>159</sup>

Only BHMAC, with the assistance of an NPA non-technical survey team seconded to it, cancelled SHA and confirmed area as mined in 2016.<sup>160</sup>

**Table 2: Survey of mined area in 2016<sup>161</sup>**

Canton	Area cancelled (m <sup>2</sup> )	Area reduced (m <sup>2</sup> )
Unsko-sanski	4,914,108	740,803
Posavski	389,460	527,159
Tuzlanski	4,004,922	1,401,296
Zeničko-dobojski	439,791	1,344,235
Bosansko-podrinjski	90,110	112,325
Srednje-bosanski	14,491,633	1,515,606
Hercegovačko-neret	7,759,750	416,783
Zapadno-hercegovački	0	0
Sarajevo	2,151,640	834,725
Canton 10	3,068,847	45,838
<b>Total Federation BiH</b>	<b>37,310,261</b>	<b>6,938,770</b>
<b>Total Republika Srpska</b>	<b>7,952,808</b>	<b>2,863,266</b>
<b>Total District Brčko</b>	<b>1,680,751</b>	<b>588,965</b>
<b>Sum totals</b>	<b>46,943,820</b>	<b>10,391,001</b>

## Clearance in 2016

In 2016, mine clearance operations in BiH were conducted by the Armed Forces, the Civil Protection of FBIH, and the Civil Protection of Republika Srpska, and thirteen other clearance organisations (see the Operators section above).<sup>162</sup> More than 60% of the organisations engaged in small tasks, clearing a total of less than 100,000m<sup>2</sup> each during the year.<sup>163</sup>

Overall, a total of almost 1.34km<sup>2</sup> was cleared in 2016, across 84 tasks, during which 1,313 anti-personnel mines, 63 anti-vehicle mines, and 1,192 items of ERW were destroyed (see Table 3).<sup>164</sup> This is less than the 1.64km<sup>2</sup> cleared in 2015,<sup>165</sup> and well below the 2009–19 mine action strategy target of 9.27km<sup>2</sup>.

**Table 3: Mine clearance in 2016<sup>166</sup>**

Canton	Area cleared (m <sup>2</sup> )	AP mines destroyed	AV mines destroyed	ERW destroyed
Unsko-sanki	75,089	69	6	57
Posavski	43,381	14	10	118
Tuzlanski	133,782	146	1	112
Zeničko-dobojski	85,974	332	11	167
Bosansko-podrinjski	27,565	3	0	10
Srednje-bosanski	302,761	151	13	72
Hercegovačko-neret	103,467	65	9	33
Zapadno-hercegovački	0	0	0	0
Sarajevo	133,635	200	0	224
Canton 10	15,315	36	4	6
Total Federation BiH	920,969	1,016	54	799
Total Republic Srpska	403,926	283	8	366
Total District Brčko	10,284	14	1	27
<b>Totals</b>	<b>1,335,179</b>	<b>1,313</b>	<b>63</b>	<b>1,192</b>

AP = Anti-personnel

AV = Anti-vehicle

Clearance operations in BiH include mechanical preparation of land, manual clearance, and the use of MDDs and SDDs depending on the geographical conditions.<sup>167</sup> In addition, NPA also deploys SDDs and observation and recording of the dogs using drones.<sup>168</sup>

BHMAC reported that land release activities under the pilot project had been fully conducted on a total of six SHAs in BiH in 2016, with an estimated total area of 25.5km<sup>2</sup>. BHMAC conducted non-technical survey, while accredited organisations conducted technical survey and mine clearance. Technical survey reduced 2km<sup>2</sup>, clearance released 0.4km<sup>2</sup> (and destroyed 215 mines and 84 pieces of ERW), and 22.3km<sup>2</sup> was released through non-technical survey. After the verification process, 24.7km<sup>2</sup> was released to the final users. As per the data provided by BHMAC, less than 10% of the SHA was treated by technical methods.<sup>169</sup>

As previously mentioned, one of the key developments that NPA reported in its clearance operations in 2015 and 2016 was the implementation of a pilot project of targeted technical survey over suspected mined areas, in coordination with BHMAC. The project, which was conducted in the municipality of Travnik, in the Middle Bosnia Canton, included development of SOPs, and

application and testing of new techniques, processes, and procedures for targeted technical survey.<sup>170</sup> It was hoped that this would increase efficiency of land release, and ensure improved assessment of mined areas, with limited need for full clearance. The results of the pilot project in Travnik municipality have been very positive, and NPA planned to expand the use of technical survey with targeted investigation in the municipality of Ravno.<sup>171</sup> For SHAs with incorrect minefield records, traditional systematic technical survey typically required 20%–30% of the resources needed for full clearance, whereas targeted technical survey only required 1%–3%, based on the results of NPA's relatively limited pilot project.<sup>172</sup>

## Deminer safety

In 2016, there were two demining accidents, both involving an anti-personnel PROM-1 mines. The first was in March 2016, during NPA clearance operations in the municipality of Usora, during which a team leader was killed by a PROM-1 mine. The second, also in March, was during technical survey operations of the non-government organization Eko-Dem in the municipality of Osmaci, during which one deminer was killed, and two people injured, also by a PROM-1 mine.<sup>173</sup>

## ARTICLE 5 COMPLIANCE

Under Article 5 of the APMBC (and in accordance with the ten-year extension request granted by states parties in 2008), BiH is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 March 2019. BiH is not on track to meet this deadline, and is planning to prepare and submit an Article 5 extension request in 2018.<sup>174</sup>

BiH has reported that its Article 5 extension request will coincide with its anticipated national mine action strategy for 2018–25, and will be in accordance with the Maputo Declaration +15, adopted in 2014.<sup>175</sup> The new strategy will also highlight the importance of full implementation of the land release concept.<sup>176</sup>

**Table 4: Mine clearance in 2012–16<sup>177</sup>**

Year	Area cleared (km <sup>2</sup> )
2016	1.34
2015	1.64
2014	1.85
2013	1.89
2012	1.30
<b>Total</b>	<b>8.02</b>

In 2016, as in all years since it was granted the ten-year extension to its initial Article 5 deadline, BiH fell far short of its land release targets.<sup>178</sup>

In May 2016, BHMAC claimed that analysis of the Mine Action Strategy 2009–19, shows that BiH is currently 3.5 years behind in fulfilling its Article 5 obligations, due to lack of funding.<sup>179</sup> BHMAC reported that more detailed information about completion of clearance would be available at the end of 2017, after it had conducted the third revision of the mine action strategy,<sup>180</sup> which is now intended to be produced as a new Mine Action Strategy for 2018–25. BHMAC did, however, report that analysis shows that the fulfilment of BiH's 2019 Article 5 deadline is currently four years behind schedule “due to funding” issues.<sup>181</sup> However, while securing sufficient funding and capacity undoubtedly impacts progress, swifter progress towards completion could be achieved through stronger management of survey and clearance operations to ensure improved land release.

It is hoped that continued and increased operationalisation of more efficient evidence-based land release methodology will significantly increase land release output in BiH. This essentially focuses on greater use of non-technical survey and technical survey (including use of targeted investigation), as trialled in various land release pilot projects, to more accurately determine the location and extent of actual contamination, and cancel areas not contaminated. In March 2016, UNDP reported that the results of the pilot project to date show that continued application of this land release approach will greatly accelerate reduction and cancellation of SHA in BiH, and reduce costs.<sup>182</sup> As at May 2017, BHMAC reported that new evidence-focused land release methodology was improving the mine action process and that it planned to greatly expand the application of technical survey with targeted investigation and of systematic technical survey in BiH.<sup>183</sup> According to BiH, “Results gained so far through the realisation of these projects in the period 2014–16 allow for optimism that the application of this concept in the next period will greatly speed up the process of releasing the suspect hazardous areas, which will become more cost effective and cheaper.”<sup>184</sup>

If approved and implemented, the plan for a country-wide re-assessment (re-survey) of SHA through high-quality non-technical survey, combined with technical interventions, will help greatly reduce the size of the currently over-inflated SHA in BiH, and ensure clearance assets are directed to areas where there is confirmed mine contamination. However, while the ratio of technical investigation to non-technical investigation methods provides an indication of the efficiency of land release operations in BiH, over time this ratio will naturally reduce, as land wrongly suspected of being mine-contaminated is cancelled/released through survey. The potential for technical survey with targeted investigation will also diminish with time, as additional information acquired through survey, including from informants, is obtained and applied.

As at June 2017, BiH reported that “activities of Land Release” (believed to refer to the new land release methodology) were being conducted at nine SHAs in BiH, with a total area of 35km<sup>2</sup>, and expected to complete process verification and release approximately 30km<sup>2</sup> to final users by the end of the year.<sup>185</sup> BiH reported that its operational plan for 2017–18 was to cancel 165km<sup>2</sup>, reduce 76.56km<sup>2</sup>, and clear 13.64km<sup>2</sup>.<sup>186</sup>

BHMAC is funded by the common institutions of BiH and other institutions at state level.<sup>187</sup> Operations of the BiH Armed Forces are supported by the budget of the common institutions of BiH, while the FBIH finances the operations of Federal Administration of Civil Protection,<sup>188</sup> and the Government of the Republic of Srpska funds the Civil Protection Administration of Republika Srpska.<sup>189</sup> According to BHMAC, small-scale investments in equipment and training could significantly increase the capabilities of both the Federal Administration of Civil Protection and the Armed Forces.<sup>190</sup>

Funding in 2017 was expected to remain at the same level as 2016.<sup>191</sup> In 2016, just under BAM34 million (approx. US\$19.3 million) was allocated to mine action operations in BiH.<sup>192</sup> Of this, 56% (BAM19 million) came from national sources while almost 44% (BAM15 million) was from international donors.<sup>193</sup> However, funding for the implementation of the Mine Action Strategy 2009–2019 is significantly less than originally planned,<sup>194</sup> which in 2016 was only 53% of the BAM63.6 million (approx. US\$36.5 million) originally forecast.<sup>195</sup> The Ministry of Civil Affairs, the Demining Commission, and BHMAC have highlighted the limited funds for demining and have requested funds from the national budget.<sup>196</sup> In addition, domestic institutions and organisations and the private sector also fund mine action, including providing support to technical survey and clearance operations.<sup>197</sup>

Analysis shows that BiH has committed a larger proportion of its national budget to mine action than many other mine-affected countries.<sup>198</sup> Nevertheless, analysis by both NPA and UNDP shows that in the first five years of the 2009–19 strategy, while international donors maintained their planned funding commitments, anticipated BiH government funding level were not met, especially with regards to planned “additional government” sources and consequently, by 2013, progress was way off target.<sup>199</sup> According to BiH, financial issues and lack of funds are the reason for the delay in fulfilling its Article 5 obligations. In the period 2006–17, only 50% of planned funds were available. The local and donor sources ensured the funds as planned, but unfortunately BiH did not provide additional funding due to its economic situation.<sup>200</sup>

The slow pace of clearance has resulted in lack of confidence in the mine action programme from donors but also from people living in mine-affected communities, who felt disillusioned that the mines have not been cleared.<sup>201</sup>

The new National Mine Action Strategy for 2018–25 due to be presented to the BiH national authorities by the end of 2017, will provide details on how and when BiH intends to achieve Article 5 completion. To implement the strategy, however, will require strong oversight and commitment from BHMAC, and the Demining Commission and their superiors in the government. Finite funding and available operational capacity must be used as effectively as possible, and evidence-based land release methodology applied to ensure land is released back to communities as efficiently as possible.

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- 1 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015; and Audit Office of the Institutions of Bosnia and Herzegovina, "Performance Audit Report. Efficiency of the Demining System in Bosnia and Herzegovina", No. 01-02-03-10-16-1-1101/16, 4 November 2016, p. 22.
- 2 Convention on Certain Conventional Weapons (CCW) Protocol V Article 10 Report (for 2016), Form A.
- 3 Email from Goran Zdralje, Senior Officer for Analysis and Reporting, BHMAC, 17 May 2017; and Article 7 Report (for 2016), Form C.
- 4 Article 7 Report (for 2016), Form C; and email from Tarik Serak, Head of Operations, BHMAC, 13 November 2017. However, BiH's Convention on Certain Conventional Weapons (CCW) Protocol V Article 10 Report (for 2016), Form A, reports suspected mined area of 1.118km<sup>2</sup> across 8,796 "micro locations".
- 5 Statement of BiH, Intersessional meetings, Geneva, 8 June 2017.
- 6 Email from Tarik Serak, BHMAC, 13 November 2017.
- 7 Article 7 Report (for 2015), Form C.
- 8 Email from Goran Zdralje, BHMAC, 17 May 2017; and BHMAC, "Report on Mine Action in BiH for 2016", February 2017, p. 5.
- 9 Article 7 Report (for 2016), Form C. This compares to an estimated 82,000 mines and UXO reported as at the end of 2015 (Article 7 Report (for 2015), Form C). BiH's CCW Protocol V Article 10 Report (for 2016), Form A, estimates approximately 79,000 mines and UXO.
- 10 Article 7 Report (for 2016), Form C.
- 11 Audit Office of the Institutions of Bosnia and Herzegovina, "Performance Audit Report. Efficiency of the Demining System in Bosnia and Herzegovina", 4 November 2016, p. 5.
- 12 UNDP, Draft Mine Action Governance and Management Assessment for Bosnia and Herzegovina, 13 May 2015, p. 17.
- 13 Interviews with Darvin Lisica, Programme Manager and Regional Director, NPA, Sarajevo, 8 May 2017; Fotini Antonopoulou, EU, Sarajevo, 8 May 2017; Tarik Serak BHMAC, Sarajevo, 10 May 2017.
- 14 Email from Suad Baljak, Mine Action Officer, UNDP, 15 September 2017.
- 15 Statement of BiH, Intersessional meetings, Geneva, 8 June 2017.
- 16 Email from Goran Zdralje, BHMAC, 17 May 2017.
- 17 BHMAC, "Analysis of implementation of mine action strategy of Bosnia and Herzegovina (2009–2019) and draft amendments", adopted by the Demining Commission on 28 March 2016, p. 3.
- 18 Audit Office of the Institutions of Bosnia and Herzegovina, "Performance Audit Report. Efficiency of the Demining System in Bosnia and Herzegovina", 4 November 2016, p. 26.
- 19 Email from Darvin Lisica, NPA, 5 May 2016.
- 20 Email from Lillian Palmbach, UNDP, 29 May 2015.
- 21 EU, "Bosnia and Herzegovina Floods 2014: Recovery Needs Assessment", undated, pp. 6, 117, at: <http://europa.ba/Download.aspx?id=1521>.
- 22 Ibid., pp. 118.
- 23 Ibid., pp. 241–43.
- 24 Revised Article 5 deadline Extension Request, 27 June 2008, p. 4; BHMAC, "Bosnia and Herzegovina Mine Action Annual Report 2014", May 2015, p. 5; and email from Tarik Serak, BHMAC, 27 May 2015.
- 25 Interview with Tarik Serak, BHMAC, Sarajevo, 20 March 2015.
- 26 Article 7 Report (for 2016), Form C.
- 27 CCW Protocol V Article 10 Report (for 2015), Form C.
- 28 Article 7 Report (for 2016), Form C.
- 29 BHMAC, "The accident in the Municipality of Bugojno", 5 September 2016, at: <http://www.bhmac.org/?p=2672&lang=en>; and Article 7 Report (for 2016), Form C.
- 30 Email from Fotini Antonopoulou, EU, 18 September 2017.
- 31 BHMAC, "The accident in the Municipality of Livno", 19 September 2016, at: <http://www.bhmac.org/?p=2752&lang=en>; and Article 7 Report (for 2016), Form C.
- 32 BHMAC, "Mine accident in the municipality Pelagićovo", 8 November 2016, at: <http://www.bhmac.org/?p=2876&lang=en>; and Article 7 Report (for 2016), Form C.
- 33 Email from David Rowe, Advisor, GICHD, 14 September 2017.
- 34 BHMAC Organisational chart, at: [http://www.bhmac.org/?page\\_id=704&lang=en](http://www.bhmac.org/?page_id=704&lang=en), accessed 28 May 2017.
- 35 The principle of organising BiH state-level bodies along ethnic lines came under scrutiny following the 2009 judgment of the European Court of Human Rights in the Seđić and Finci case that the rights of two Bosnians of Roma and Jewish descent had been violated by being denied the opportunity to run for high-level elected office because they were not of the major ethnic groups. European Court of Human Rights, *Seđić and Finci v. Bosnia and Herzegovina*, Judgment, 22 December 2009; UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, p. 22; and email from Suad Baljak, UNDP, 15 June 2017.
- 36 BHMAC, "The appointment of new members of Demining Commission in Bosnia and Herzegovina", News item, 24 July 2015; and "Official Gazette of BH", No. 67/15 – Decision of establishment of demining commission of BH by Counsel of Ministers of BH, 30 July 2015.
- 37 Email from Suad Baljak, UNDP, 15 September 2017.
- 38 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, p. 22.
- 39 Ibid.; and Audit Office of the Institutions of Bosnia and Herzegovina, "Performance Audit Report. Efficiency of the Demining System in Bosnia and Herzegovina", No. 01-02-03-10-16-1-1101/16, 4 November 2016, p. 22.
- 40 Audit Office of the Institutions of Bosnia and Herzegovina, "Performance Audit Report. Efficiency of the Demining System in Bosnia and Herzegovina", 4 November 2016, p. 8.
- 41 Bosnia and Herzegovina Official Gazette, Sarajevo, 17 March 2002.
- 42 BHMAC Organisational chart, accessed 23 August, at: [http://www.bhmac.org/?page\\_id=704&lang=en](http://www.bhmac.org/?page_id=704&lang=en).
- 43 Audit Office of the Institutions of Bosnia and Herzegovina, "Performance Audit Report. Efficiency of the Demining System in Bosnia and Herzegovina", 4 November 2016.
- 44 Council of Ministers of BiH, "The conclusions of the 24th session of the Council of Ministers of Bosnia and Herzegovina", 22 September 2015.
- 45 Interview with Saša Obradovic, Director, BHMAC, Sarajevo, 10 May 2017; and email from David Rowe, Advisor, GICHD, 14 September 2017.
- 46 BHMAC, "Analysis of implementation of mine action strategy of Bosnia and Herzegovina (2009–2019) and draft amendments", adopted by the Demining Commission on 28 March 2016, p. 17.
- 47 Audit Office of the Institutions of Bosnia and Herzegovina, "Performance Audit Report. Efficiency of the Demining System in Bosnia and Herzegovina", 4 November 2016, pp. 24 and 31.
- 48 Interview with Tarik Serak, BHMAC, Sarajevo, 10 May 2017; and emails from Fotini Antonopoulou, EU, 19 June 2017; and Suad Baljak, UNDP, 15 June 2017; and UNDP BiH, "Mine Action Board of Donors Meeting", 31 March 2016, at: [http://www.ba.undp.org/content/bosnia\\_and\\_herzegovina/en/home/presscenter/articles/2016/03/31/sastanak-odbora-donatora-za-protuminske-akcije.html](http://www.ba.undp.org/content/bosnia_and_herzegovina/en/home/presscenter/articles/2016/03/31/sastanak-odbora-donatora-za-protuminske-akcije.html).
- 49 Interviews with Haris Lokvancic, Advisor on Political Affairs, Programme Officer – Human Security/Justice, Swiss Embassy, Sarajevo, 9 May 2017; Fotini Antonopoulou, EU, Sarajevo, 10 May 2017, and Lt.-Col. Martin Herrmann, Defence Attaché to Bosnia and Herzegovina and Kosovo, German Embassy, Sarajevo, 10 May 2017.
- 50 Emails from David Rowe, GICHD, 14 September 2017; and Josephine Dresner, Programme Manager, MAG, 24 September 2017.
- 51 Audit Office of the Institutions of Bosnia and Herzegovina, "Performance Audit Report. Efficiency of the Demining System in Bosnia and Herzegovina", 4 November 2016, p. 28.
- 52 Interview with Tarik Serak, BHMAC, 10 May 2017, Sarajevo.
- 53 Email from Goran Zdralje, BHMAC, 17 May 2017.
- 54 Interview with Blažen Kovač, Ministry of Defence, and Chair of the Demining Commission, Sarajevo, 10 May 2017.
- 55 Email from Suad Baljak, UNDP, 15 June 2017.
- 56 CCW Protocol V Article 10 Report (for 2015), Form B.
- 57 Statement of BiH, 13th Meeting of States Parties, Geneva, 5 December 2013, p. 2.
- 58 Ibid.
- 59 Ibid., pp. 2–3.
- 60 UNDP, "Draft Mine Action Governance and Management Assessment for Bosnia and Herzegovina", 13 May 2015, p. 17.
- 61 Email from Tarik Serak, BHMAC, 23 April 2015.
- 62 Interviews with Amir Mujanovic, Landmine Survivors Initiative, Sarajevo, 19 March 2015, and Radosav Zivkovic, STOP Mines, Sarajevo, 20 March 2015.

- 63 Interview with Dominika Skubida, EU, Sarajevo, 19 March 2015.
- 64 Statement of BiH, 14th Meeting of States Parties, Geneva, 18 December 2015; and email from Tarik Serak, BHMAC, 26 May 2016.
- 65 Email from Tarik Serak, BHMAC, 26 May 2016.
- 66 BHMAC, "Analysis of implementation of mine action strategy of Bosnia and Herzegovina (2009–2019) and draft amendments", adopted by the Demining Commission on 28 March 2016, p. 14.
- 67 Ibid., p. 6; and Statement of BiH, 14th Meeting of States Parties, Geneva, 1 December 2015.
- 68 Email from Goran Zdrave, BHMAC, 17 May 2017; and Audit Office of the Institutions of Bosnia and Herzegovina, "Performance Audit Report. Efficiency of the Demining System in Bosnia and Herzegovina", 4 November 2016, p. 25.
- 69 Interview with Åsa Massleberg, Advisor, Strategic Management, GICHD, Geneva, 9 March 2017; email from Goran Zdrave, BHMAC, 17 May 2017; and Statement of BiH, Intersessional meetings, Geneva, 8 June 2017.
- 70 BHMAC, "From 7 till 11 November a workshop on National Mine Action Strategy and prioritisation is being held", 7 November 2016, at: <http://www.bhmac.org/?p=2853&lang=en>; "Workshop on "Revision of Mine Action Strategy 2009–2019" held in Sarajevo", 17 February 2017, at: <http://www.bhmac.org/?p=3067&lang=en>; and emails from Anna-Lena Schluchter, containing information from Åsa Massleberg, GICHD, 20 and 29 June 2017.
- 71 Email from Goran Zdrave, BHMAC, 17 May 2017; and interview with Saša Obradovic, BHMAC, Sarajevo, 10 May 2017.
- 72 Interviews with Åsa Massleberg, GICHD, Geneva, 9 March 2017; and Saša Obradovic, BHMAC, Sarajevo, 10 May 2017.
- 73 Statement of BiH, Intersessional meetings, Geneva, 8 June 2017.
- 74 Email from Suad Baljak, UNDP, 15 September 2017.
- 75 Statement of BiH, Intersessional meetings, Geneva, 8 June 2017.
- 76 Email from Suad Baljak, UNDP, 15 September 2017.
- 77 Statement of BiH, Intersessional meetings, Geneva, 8 June 2017; and BHMAC, "Analysis of implementation of mine action strategy of Bosnia and Herzegovina (2009–2019) and draft amendments", adopted by the Demining Commission on 28 March 2016, p. 6.
- 78 Email from Suad Baljak, UNDP, 15 September 2017.
- 79 Interview with Saša Obradovic, BHMAC, Sarajevo, 10 May 2017.
- 80 Interviews with Haris Lokvancic, Swiss Embassy, Sarajevo, 9 May 2017; and Fotini Antonopoulou, EU, Sarajevo, 8 May 2017.
- 81 Interview with Saša Obradovic, BHMAC, Sarajevo, 10 May 2017.
- 82 Interviews with Darvin Lisica, NPA, Sarajevo, 8 May 2017; Fotini Antonopoulou, EU, Sarajevo, 8 May 2017; and Saša Obradovic and Tarik Serak, BHMAC, Sarajevo, 10 May 2017.
- 83 Interviews with Darvin Lisica, NPA, Sarajevo, 8 May 2017; and Saša Obradovic, BHMAC, Sarajevo, 10 May 2017.
- 84 Interview with Darvin Lisica, NPA, Sarajevo, 8 May 2017.
- 85 Ibid.
- 86 Email from Darvin Lisica, NPA, 31 August 2017.
- 87 Email from Suad Baljak, Mine Action Officer, UNDP, 15 September 2017.
- 88 Ibid.; and Darvin Lisica, "Application of targeted technical survey in Bosnia and Herzegovina: development of advanced techniques for data collection and assessment, standard operating procedures and building of national capacities", NPA, undated.
- 89 Interview with Darvin Lisica, NPA, Sarajevo, 8 May 2017.
- 90 Ibid.
- 91 Ibid.; and Darvin Lisica, "Application of targeted technical survey in Bosnia and Herzegovina: development of advanced techniques for data collection and assessment, standard operating procedures and building of national capacities"; and "Workshop conclusions: Evaluation of the results of projects technical survey with targeted investigation implemented in Bosnia and Herzegovina in 2016", BHMAC and NPA, 2017.
- 92 Interview with Darvin Lisica, NPA, Sarajevo, 8 May 2017.
- 93 "Workshop conclusions: Evaluation of the results of projects technical survey with targeted investigation implemented in Bosnia and Herzegovina in 2016", BHMAC and NPA, 2017.
- 94 Interviews with Saša Obradovic and Tarik Serak, BHMAC, Sarajevo, 10 May 2017; Darvin Lisica, NPA, Sarajevo, 8 May 2017; Fotini Antonopoulou, EU, Sarajevo, 8 May 2017; Haris Lokvancic, Swiss Embassy, Sarajevo, 9 May 2017; Muamer Husilović and Ahmet Dulović, Federal Civil Protection of BiH, Sarajevo, 10 May 2017; and Lt.-Col. Dzevad Zenunovic, Demining Battalion of the Armed Forces of BiH, Sarajevo, 10 May 2017.
- 95 Interview with Darvin Lisica, NPA, Sarajevo, 8 May 2017; and Darvin Lisica, "Application of targeted technical survey in Bosnia and Herzegovina: development of advanced techniques for data collection and assessment, standard operating procedures and building of national capacities".
- 96 Emails from Darvin Lisica, NPA, 31 August 2017; and Tarik Serak, BHMAC, 24 October 2017.
- 97 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, p. 25.
- 98 Email from Goran Zdrave, BHMAC, 17 May 2017.
- 99 UNDP, "Mine Action Board of Donors Meeting", 31 March 2016, at: [http://www.ba.undp.org/content/bosnia\\_and\\_herzegovina/en/home/presscenter/articles/2016/03/31/sastanak-odbora-donatora-za-protuminske-akcije.html](http://www.ba.undp.org/content/bosnia_and_herzegovina/en/home/presscenter/articles/2016/03/31/sastanak-odbora-donatora-za-protuminske-akcije.html); and email from Amela Balic, NPA, 17 June 2016.
- 100 Audit Office of the Institutions of Bosnia and Herzegovina, "Performance Audit Report. Efficiency of the Demining System in Bosnia and Herzegovina", 4 November 2016, p. 23.
- 101 Interview with Zdravko Jonjić, Assistant Director for Operations, BHMAC, Sarajevo, 10 May 2017.
- 102 Email from Suad Baljak, UNDP, 15 June 2017; and see: <http://sllist.ba/glasnik/2016/broj70/broj070.pdf>, p. 8.
- 103 Statement of BiH, Intersessional meetings, Geneva, 8 June 2017.
- 104 Telephone interview with David Rowe, GICHD, 29 September 2017.
- 105 BHMAC, "Consultation process on the Law on Amendments to the Law on Demining in Bosnia and Herzegovina", 28 December 2016, at: <http://www.bhmac.org/?p=3037&lang=en>.
- 106 Statement of BiH, Intersessional meetings, Geneva, 8 June 2017.
- 107 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, pp. 23 and 24.
- 108 Interview with Tarik Serak, BHMAC, Sarajevo, 20 March 2015.
- 109 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, p. 23.
- 110 Ibid., pp. 19 and 20.
- 111 Statement of BiH, Annex on Land Release, Intersessional meetings, Geneva, 8 June 2017.
- 112 Ibid.
- 113 BHMAC, "Adoption of three new chapters of Mine Action Standard for land release, the new approach for solving the mine problem", 28 January 2016; and email from Fotini Antonopoulou, EU, 18 September 2017.
- 114 Ibid.; email from Tarik Serak, BHMAC, 26 May 2016; Article 7 Report (for 2016), Form C; and Statement of BiH, Intersessional meetings, Geneva, 8 June 2017.
- 115 Email from Suad Baljak, UNDP, 15 September 2017, and BHMAC, at: <http://www.bhmac.org/wp-content/uploads/2017/05/Privremeno-uputstvo-za-osiguranje-i-kk-za-LR.pdf>.
- 116 Article 7 Report (for 2016), Form C; and Statement of BiH, Intersessional meetings, Geneva, 8 June 2017.
- 117 Email from Amela Balic, NPA, 20 October 2016.
- 118 BHMAC, "Report on Mine Action in BiH for 2016", February 2017, p. 20.
- 119 Email from Goran Zdrave, BHMAC, 17 May 2017; and BHMAC, "Report on Mine Action in BiH for 2016", February 2017, pp. 18 and 24.
- 120 Emails from Goran Zdrave, BHMAC, 17 May 2017 and Suad Baljak, UNDP, 15 September 2017; and Statement of BiH, Intersessional meetings, Geneva, 8 June 2017.
- 121 BHMAC, "Bosnia and Herzegovina Mine Action Annual Report 2011", adopted by the Demining Commission, May 2012, p. 22; and email from Tarik Serak, BHMAC, 6 May 2014.
- 122 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, pp. 6, 27.
- 123 Audit Office of the Institutions of Bosnia and Herzegovina, "Performance Audit Report. Efficiency of the Demining System in Bosnia and Herzegovina", 4 November 2016, pp. 5 and 9.

- 124 Ibid., pp. 27–28.
- 125 Interview with Saša Obradovic, B HMAC, Sarajevo, 10 May 2017.
- 126 B HMAC, "Report on Mine Action in BiH for 2016", February 2017, p. 18.
- 127 B HMAC, "Report on Mine Action in BiH for 2016", February 2017, p. 20.
- 128 Ibid., p. 21, and CCW Protocol V Article 10 Report (for 2016), Form A.
- 129 Email from Goran Zdral, B HMAC, 17 May 2017; and B HMAC, "Report on Mine Action in BiH for 2016", February 2017, p. 12.
- 130 Email from Goran Zdral, B HMAC, 17 May 2017.
- 131 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, p. 29.
- 132 Ibid.; and interviews with Darvin Lisica, NPA, Sarajevo, 8 May 2017; Haris Lokvancic, Swiss Embassy, Sarajevo, 9 May 2017; and Tarik Serak, B HMAC, Sarajevo, 10 May 2017.
- 133 Interview with Lt.-Col. Dzevad Zenunovic, Demining Battalion of the Armed Forces of BiH, Sarajevo, 10 May 2017.
- 134 Ibid.
- 135 Ibid.; and email from Goran Sehić, Deputy Programme Manager, NPA BiH, 18 October 2017.
- 136 Email from Amela Balic, NPA Bosnia, 15 April 2015.
- 137 Emails from Darvin Lisica, NPA, 5 May 2016; and Goran Sehić, NPA, 10 July 2017.
- 138 Email from Fotini Antonopoulou, EU, 18 September 2017.
- 139 Interview with Lt.-Col. Dzevad Zenunovic, Demining Battalion of the Armed Forces of BiH, Sarajevo, 10 May 2017.
- 140 Interview with Muamer Husilović and Ahmet Dulović, Federal Civil Protection of BiH, Sarajevo, 10 May 2017; and interview with Tarik Serak, B HMAC, Sarajevo, 10 May 2017.
- 141 UN, Mine Action Recovery Needs Assessment, 2015, p. 30.
- 142 Email from Suad Baljak, UNDP, 15 September 2017.
- 143 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, pp. 30–31.
- 144 Email from Goran Sehić, NPA, 10 July 2017; and interview with Darvin Lisica, NPA, Sarajevo, 8 May 2017.
- 145 Email from Goran Sehić, NPA, 10 July 2017.
- 146 Ibid.
- 147 Interview with Darvin Lisica, NPA, Sarajevo, 8 May 2017.
- 148 Email from Amela Balic, NPA Bosnia, 15 April 2015.
- 149 Email from Goran Sehić, NPA, 10 July 2017.
- 150 Interview with Josephine Dresner, MAG, Sarajevo, 9 May 2017.
- 151 UNDP, Draft Mine Action Governance and Management Assessment for BiH, p. 35.
- 152 Email from Fotini Antonopoulou, EU, 18 September 2017.
- 153 Email from Goran Zdral, B HMAC, 17 May 2017.
- 154 Email from Tarik Serak, B HMAC, 26 May 2016.
- 155 Ibid., 24 October 2017.
- 156 Article 7 Report (for 2016), Form C; and email from Goran Zdral, B HMAC, 17 May 2017.
- 157 Email from Tarik Serak, B HMAC, 24 October 2017.
- 158 Email from Goran Zdral, B HMAC, 17 May 2017.
- 159 Ibid.
- 160 Ibid.; and email from Goran Sehić, NPA, 10 July 2017.
- 161 Article 7 Report (for 2016), Form C; and email from Goran Zdral, B HMAC, 17 May 2017.
- 162 Email from Goran Zdral, B HMAC, 17 May 2017; and B HMAC, "Report on Mine Action in BiH for 2016", February 2017, p. 11.
- 163 Email from Goran Zdral, B HMAC, 17 May 2017.
- 164 Article 7 Report (for 2016), Form C; and email from Goran Zdral, B HMAC, 17 May 2017.
- 165 Email from Tarik Serak, B HMAC, 26 May 2016
- 166 Article 7 Report (for 2016), Form C; B HMAC, "Report on Mine Action in BiH for 2016", February 2017, p. 11; and email from Goran Zdral, B HMAC, 17 May 2017.
- 167 Email from Goran Zdral, B HMAC, 17 May 2017.
- 168 Ibid.
- 169 Statement of BiH, Intersessional meetings, Geneva, 8 June 2017; B HMAC, "Report on Mine Action in BiH for 2016", February 2017, p. 19; and emails from Goran Zdral, B HMAC, 17 May and 10 July 2017.
- 170 Email from Darvin Lisica, NPA, 5 May 2016.
- 171 Email from Goran Sehić, NPA, 10 July 2017.
- 172 Email from Darvin Lisica, NPA, 5 May 2016.
- 173 Article 7 Report (for 2016), Form C; B HMAC, "Report on Mine Action in BiH for 2016", February 2017, p. 6.; and emails from Goran Zdral, B HMAC, 17 May and 19 October 2017.
- 174 Interview with Saša Obradovic, B HMAC, Sarajevo, 10 May 2017.
- 175 Statement of BiH, Intersessional meetings, Geneva, 8 June 2017.
- 176 Ibid.
- 177 See Mine Action Review and Landmine Monitor reports on clearance in BiH covering 2012–15.
- 178 B HMAC, "Analysis of implementation of mine action strategy of Bosnia and Herzegovina (2009–2019) and draft amendments", adopted by the Demining Commission on 28 March 2016, p. 19.
- 179 Email from Tarik Serak, B HMAC, 26 May 2016.
- 180 Ibid.; and email from Goran Zdral, B HMAC, 17 May 2017.
- 181 Email from Goran Zdral, B HMAC, 17 May 2017.
- 182 UNDP, "Mine Action Board of Donors Meeting", Press release, 31 March 2016.
- 183 Email from Goran Zdral, B HMAC, 17 May 2017.
- 184 Statement of BiH, Intersessional meetings, Geneva, 8 June 2017.
- 185 Ibid.
- 186 Article 7 Report (for 2016), Form C.
- 187 Email from Goran Zdral, B HMAC, 17 May 2017.
- 188 Ibid.
- 189 Email from Suad Baljak, UNDP, 15 September 2017.
- 190 Statement of BiH, First CCM Review Conference, Dubrovnik, 9 September 2015; and interview with Tarik, B HMAC, Sarajevo, 10 May 2017.
- 191 Email from Goran Zdral, B HMAC, 17 May 2017.
- 192 B HMAC, "Report on Mine Action in BiH for 2016", February 2017, p. 23.
- 193 Ibid.
- 194 B HMAC, "Five years since the entry into force of the Convention on Cluster Munitions", 3 August 2015.
- 195 B HMAC, "Report on Mine Action in BiH for 2016", February 2017, pp. 23 and 24.
- 196 Interview with Lt.-Col. Dzevad Zenunovic, Ministry of Defense, Chair of the Demining Commission, Sarajevo, 10 May 2017.
- 197 Email from Goran Zdral, B HMAC, 17 May 2017.
- 198 NPA, "Humanitarian Disarmament Programme in Bosnia and Herzegovina", PowerPoint Presentation, 17 April 2014; and UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, p. 21.
- 199 UNDP, Draft Mine Action Governance and Management Assessment for BiH, 13 May 2015, pp. 17 and 21; and NPA, "Humanitarian Disarmament Programme in Bosnia and Herzegovina", PowerPoint presentation, 17 April 2014.
- 200 Statement of BiH, Intersessional meetings, Geneva, 8 June 2017.
- 201 Ibid., p. 14.