1. Introduction

Forensic services are key to an effective and fair criminal justice system. Forensic experts provide objective and timely information for police investigators to identify suspects during investigations and for attorneys, prosecutors, and judges to argue and adjudicate a criminal case during trial.

Criminal justice systems rely on the impartial data provided by forensic science laboratories to process cases based on physical evidence. Forensic best practices are fundamental for recognizing and preserving all items of evidence, for avoiding the loss, deterioration, or contamination of evidence, and for ensuring the "chain of custody".

The main provider of forensic services in the Kyrgyz Republic is the State Forensic Service (SFS, Forensic Service) under the Ministry of Justice. Over 80% of cases requiring forensic evidence are handled by this agency. The Forensic Service employs a total of 128 staff, of which 107 are specialists and 21 support staff. 96 specialists work in the main laboratory in Bishkek and 11 in field branches (7 specialists in Osh and 4 specialists in Balykchi).

The Forensics Service offers more than 50 different types of expertise, including examination of seized materials, drugs, firearms and ammunition, fire and explosives, trace evidence, forensic accounting, soil, alcohol, chemicals, oil and paint analysis, construction assessment, document and handwriting analysis, crime scene investigations, as well as psycholinguistic and religious study of documents, audio/video materials and internet resources (the latter a new discipline mainly used in extremism and terrorism related cases). The type of provided expertise continues to expand.
Until 2012, the work of the Forensic Service was regulated by a Statute approved by the Government in 1999. Since 2013, provision of forensic services is governed by the Law on Forensic Examination, which defines guiding principles for forensic services, basic rights and responsibilities of forensic experts, and basic rules for the provision of forensic services in court proceedings.

UNODC launched the INL-funded project “Strengthening forensic services in the Kyrgyz Republic” following the adoption of the 2013 Law. The project was implemented in the context of a criminal justice reform process also initiated around that time (based on a 2012 Presidential Decree), which aimed to establish a more humane, effective, accountable, and transparent criminal justice system, with strict adherence to fair trial guarantees, judicial control and an increased role for forensic services in the criminal procedure so that cases would be built based on physical evidence rather than on confession and testimony.

The project was designed to address key challenges faced by the State Forensic Service, such as:
- Dilapidated infrastructure and inappropriate working conditions with the main laboratory in Bishkek housed in a 48-year-old building.
- Insufficient on the job training of forensic experts with no training curriculum and materials in place.
- Poor quality management due to a lack of documented methods and standard operating procedures (SOPs) for specific types of expertise.
- Limited international cooperation and exchange of experiences with accredited laboratories and no experience with external proficiency tests that help build capacity and ensure quality management and control.

The project adopted a comprehensive approach to address these challenges and establish a foundation for the sustainable management of forensic services. Technical assistance to refurbish the premises of the State Forensic Services and provision of office equipment and furniture was combined with legal advice, training and support to policy development and inter-agency coordination to strengthen both the quality and impact of forensic service and management capacity at the State Forensic Service.

In this manner the project supported the State Forensic Service to prepare for international accreditation in line with ISO 17025 – the main international standard containing general requirements for the competence of testing and calibration laboratories. Application of this standard is a measure of guarantee that laboratories produce valid and objective results based on a standardized quality management system.

The project was implemented in 3 phases. The initial phase from 2014 to 2016 focused on infrastructure development. This involved full refurbishment of a building assigned by the Government to house the State Forensic Service to facilitate the agency’s move from its old laboratory to the new premises.

This first phase served to raise awareness of international standards for forensic services, conduct needs assessments, develop an action plan for international accreditation and facilitate exchange of experience and initial training of forensic experts. This period also featured support to the introduction of more comprehensive provisions to govern forensic expertise in the new Criminal Procedure Code and initial capacity development on quality management, with the State Forensic Service joining the UNODC International Collaborative Exercises (ICE) Program for the first time to ensure continuous monitoring and mentoring in drug analysis.

The second phase (2016-2018) focused on strengthened case management through the establishment of a centralized system to ensure safe chain of custody of evidence; strengthened quality management through the development of a quality control manual and standard operating procedures
and related training modules for specific forms of expertise; and further implementation of the action plan on preparation for international accreditation.

The third phase (2018-2020) continued this process with further work on the quality management system, continued participation in the ICE Program, and facilitation of enhanced partnerships with accredited forensic services to advance with preparations for international accreditation for selected forms of expertise.

### 2. Activities Implemented and Results Achieved

#### Phase 1 (2014-2016)

**Output 1: Building of the State Forensic Service refurbished and equipped**

**Results:**

- Comprehensive needs assessment conducted to assist planning for the new building of the Forensic Service.
- Full package of design documentation developed with the involvement of national and international engineers.
- International tender procedure for the provision of construction services completed in full compliance with standard procedures for open, competitive, and transparent procurement.
- New building of the Forensic Service fully refurbished with construction works in the amount of 685,000 USD completed to accommodate over 100 forensic staff in new premises with a size of over 1200 square meters.

#### Output 2: Strategic plan for implementation of the Law on Forensic Services developed

- New criminal legislation drafted, including enhanced provisions on the role of forensic examinations in criminal proceedings.
- Functional analysis of forensic services provided by different State agencies conducted and package of normative documents prepared to support a government working group tasked with the creation of a unified state forensic service.
Output 3: Standard operating and quality control procedures enhanced

Results:
- Compendium of reference materials on international standards for forensic services, including the international Laboratory Accreditation Cooperation (ILAC) Guidelines for Forensic Science Laboratories and the ISO 17025 and 17020 standards translated in Russian and disseminated among the Forensic Service, the Kyrgyz Accreditation Center and other relevant forensic laboratories and stakeholders.
- Comprehensive review of the State Forensic Center’s compliance with international standards (ISO/IEC 17025) completed.
- Accreditation plan for the period from 2015-2020 endorsed to guide the Forensic Service’s work to prepare for international accreditation in compliance with ISO / IEC 17025.
- Quality Management Specialist appointed by the Forensic Service to follow up on the implementation of the Action Plan.
- Unified register of expert methodologies and certified forensic experts created to include both experts of the State Forensic Service and experts of the Ministry of Interior (posted on the SFC website at: http://sudexpert.gov.kg).

Output 4: Training program for forensic experts implemented and institutionalized

Results:
- Training needs assessment conducted with support from international experts from Georgia and specific recommendations on professional development of forensic experts made.
- Training curriculum and thematic training plan for the period from 2015 – 2018 endorsed by the SFS to strengthen capacity of forensic experts.
- Training program delivered to strengthen capacity of 50 forensic experts in modern methods of analysis, good laboratory practices and quality management control, including on-the-job training on gas chromatography–mass spectrometry, and use of equipment for examination of documents, fingerprints, and firearms.
- 2 training modules developed and validated on document and handwriting examination with involvement of forensic staff and academics from the Kyrgyz Law Academy.
- Participation of the Forensic Service in the UNODC International Collaborative Exercises (ICE) Program for drug testing laboratories facilitated.

Output 5: Coordination and partnerships with law enforcement, courts and other relevant stakeholders enhanced

- Technical Forensic Sub-Committee established under the Kyrgyz Accreditation Center, which included representatives from the State Forensic Service, Ministry of Interior, Drug Control Service, Republican Center for Forensic Medical Examination to increase the level of coordination between forensic laboratories, enhance knowledge sharing and networking and to support the preparation for the international accreditation.
✓ Regional conference "Modern quality standards of forensic expertise" held for representatives of forensic services from different countries (Kazakhstan, Kyrgyzstan, Tajikistan, Russia and USA) to share experiences on quality assurance, new trends in forensics and international cooperation.
✓ Official website of the State Forensic Service launched (http://sudexpert.gov.kg), and selected administrators trained to maintain it.

Phase 2 (2016-2018)

Output 1: Centralized system for case management and safe chain of custody of evidence established

Results:
✓ Standard operating procedures (SOPs) developed for receiving, storing, and handling physical evidence.
✓ Evidence storage facility established and equipped with armored doors, magnetic key opening, a fire extinguishing and alarm system, as well as video surveillance.
✓ Bar-coding system procured and installed for the registration of forensic evidence and safe storage in the new facility.
✓ Library room created, including office equipment, furniture, and training and reference materials on forensic science, with an average number of visits of 120 people per month.

Output 2: Quality control system for forensic services strengthened

Results:
✓ Quality Control Manual developed.
✓ 31 forensic experts (35 percent women) trained on the application of the new manual and related principles of forensic quality management.
✓ 6 forensic experts exposed to international experience in obtaining international accreditation in accordance with ISO 17025 and organization of a quality management system based on an exchange visit to Serbia (i.e. National Forensics Center at the Ministry of Internal Affairs of Serbia).
✓ Mentoring provided on specific forms of expertise, such as drug testing, ballistics, and forensic examination of luminophores, documents and handwriting, during the exchange visit.
✓ Mentoring provided to the Quality Management Specialist and continued participation in the ICE program facilitated.
Output 3: Action Plan on preparation for international accreditation implemented

Results:

- Five (5) standard operating procedures (SOPs) developed on drug testing, ballistics and examination of chemicals, documents, and handwriting.
- Three (3) training modules developed on drug testing, ballistics, and examination of chemicals.
- 10 forensic experts (of whom 20 per cent women) trained on the use of the SOPs.
- Professional reviews of the SOPs and training modules prepared by the Forensic Center under the Ministry of Justice of the Republic of Kazakhstan to support their validation.

Phase 3 (2018-2020)

Output 1: Action plan developed and implemented to improve the performance of specific forensic laboratories to meet internationally accepted standards

Results:

- Technical assistance provided to improve the ventilation system of the Forensics Service and install video surveillance to ensure safe and proper working conditions for forensic staff.
- Four (4) types of expertise selected for work on international accreditation (drug testing and examination of chemicals, handwriting and documents).
- Procedure for conducting interlaboratory comparisons developed and submitted to the Kyrgyz Accreditation Center (KAC) to support preparations for international accreditation.
- Inventory of required documentation completed, and action plan drafted to improve the performance of the drug laboratory in line with internationally accepted standards (in partnership with the SFS’s Department of Forensic Examination of Materials, Substances and Products).

Output 2: Training program for forensic staff implemented and institutionalized

Results:

- Training Center of the State Forensic Service established following completion of refurbishment works and the provision of office equipment and furniture.
- Online mentoring provided by internationally accredited forensic laboratories (i.e. Levan Samkharauli National Forensic Bureau and Forensic Criminalistics Department of the Ministry of Interior of Georgia) on implementation of the Forensic Service’s quality management system.
- Six (6) forensic experts trained on ballistic and handwriting examinations (in partnership with EU ACT).
- Internship program facilitated with 20 (30% female) young forensic experts and 80 (50% female) university students using the new Training Center and completing internships at the SFS to support efforts to expand the pool of forensic professionals in Kyrgyzstan.
Output 3: Coordination and partnerships with relevant criminal justice practitioners and forensic services enhanced

Results:

✓ Four (4) coordination meetings conducted, including two (2) with representatives of the National Forensic Bureau and Forensic Criminalistics Department of the Ministry of Interior of Georgia.

✓ Nine (9) forensic experts exposed to international experience in obtaining international accreditation in accordance with ISO 17025 and organization of a quality management system based on an exchange visit to Georgia.

✓ Regulation drafted for the creation of a Forensics Coordination Council to determine priority areas for the development of forensic services and strengthen coordination among all government and non-government forensic laboratories.

✓ 45 officers of the State Committee on National Security and 32 of the Ministry of Interior trained on proper appointment of forensic expertise and its use as evidence in line with new criminal procedural legislation.

✓ Outreach campaign implemented to raise public awareness about forensic science services resulting in 25 online publications, which were read by at least 19,000 people.

3. Project impact and sustainability

Overall, the project has been successful in establishing a foundation for the sustainable management of forensic services based on the following key project results:

- Legal basis for forensic services in the justice system strengthened with dedicated provisions in the Criminal Procedure Code, which was adopted in 2017 and entered into force in 2019 fully reflecting 26 and partly reflecting 2 out of 30 recommendations put forward by the project.

- 30 recommendations proposed, were fully included, 2 were partly included and only 2 were not included. New premises of the Forensic Service are in place following a large-scale refurbishment. This allowed the Forensic Service to move from its old office, which was totally unfit for purpose, to a new facility with proper office and laboratory space, including furniture, light, electricity, and ventilation, for its over 100 forensic experts.

- Other technical support, such as the establishment of a new evidence storage facility with an electronic database and barcode system for the registration of forensic evidence, as well as a library and a training room, has created sufficient conditions from which the Forensic Service can work on capacity development of forensic experts.
- An action plan is operational to guide work towards international accreditation of Kyrgyzstan’s forensic services based on the international ISO/IEC 17025 standard.
- Cooperation with accredited forensic laboratories (e.g., Georgia) has been established to provide professional mentoring and implement the action plan for international accreditation.
- To prioritize this effort, the post of Quality Management Specialist has been established in the Forensic Service, as well as a Technical Committee under the Kyrgyz Accreditation Centre of the Ministry of Economy to facilitate coordination on the development of SOPs and other steps towards international accreditation.
- Eleven (11) SOPs and five (5) training modules have been completed and 127 experts (of whom over 30 per cent women) trained on quality assurance procedures and case management.
- Participation of the Forensic Service in external proficiency testing has been successfully institutionalized with the SFS’s performance in the UNODC ICE program marked as the best in the Central Asian region. This is an indication of improved quality of drug testing. The number of timely drug tests reported has also gone up by 10% during the lifetime of the project.

During the third phase of the project the Forensic Service selected four (4) key types of forensic expertise (handwriting, technical expertise of documents, narcotic drugs and chemicals) as priorities for international accreditation. By the end of the project, the Forensic Service was working with mentoring support from international accredited laboratories (i.e., Georgia) to implement the accreditation action plan.

4. Communication and visibility

The project paid particular attention towards ensuring proper visibility of the project interventions and promotion of the forensic agenda and related developments in the country. A variety of communication tools were used to raise awareness about the project’s
activities including the UNODC web-site\(^1\), UN Kyrgyzstan website\(^2\), social media (Facebook\(^3\), twitter).

At least 8 web stories were developed and published during the lifetime of the project. High profile events, such as the launch of refurbishment works and the opening of the newly refurbished building of the Forensics Centre, were organized with strong media engagement.

The project developed a leaflet on the project, which was widely disseminated among the key project beneficiaries and partners. The project distributed a monthly calendar of events.

The project supported the development of an official website for the State Forensic Service (http://sudexpert.gov.kg) to support its outreach work and make available more information forensic services to the public and users of forensic services, such as law enforcement bodies, the justice sector, academia and civil society. The project trained forensic staff to maintain the website.

In 2019-2020, the project worked with the Forensics Service to conduct a media campaign to inform the wider public about the importance of forensic science for the rule of law and respect for human rights. The campaign resulted in 25 online publications, which were read by at least 19,000 people. A compilation of the published materials has been developed.

5. Partnerships

The project established partnerships with both national and international partners. At the national level, UNODC facilitated collaboration between the State Forensics Service and the Kyrgyz Accreditation Centre of the Ministry of Economy to coordinate work on international accreditation. This involved the creation of a Technical Committee under the Kyrgyz Accreditation Center with the participation of all relevant forensic laboratories in the country, including experts from the State Forensic Service, Ministry of Interior, Drug Control Service, Republican Center for Forensic Medical Examination.

When the project started, the Forensics Service operated under the Ministry of Justice. Based on a government decree, in 2017, the Forensics Service was placed directly under the Government with the

\(^1\) [https://www.unodc.org/centralasia/frontpage/index.html](https://www.unodc.org/centralasia/frontpage/index.html)


\(^3\) [https://www.facebook.com/UNODCCentralAsia/](https://www.facebook.com/UNODCCentral Asia/)
mandate to coordinate all forensic services and related policies. The project had to maneuver in this institutional environment, supporting the government working group established to coordinate the creation of a unified forensic service with a functional analysis of all available forensic laboratories in the country and developing a package of normative documents to facilitate the related government deliberations.

Following the adoption of the new Criminal Procedure Code, which allows a diversity of forensic service providers, including in the private sector, the project facilitated coordination and partnerships to raise awareness of non-state forensic service providers, including via meetings with State bodies, academia, and forensic experts from 6 independent forensic entities.

At the international level, the project initially focused on providing opportunities for networking and exchange of experiences, for example through an international conference. The project collaborated with the UNODC Laboratory and Scientific Section in Vienna to enroll the State Forensic Service in the ICE Program. The SFS has also joined the Regional Working Group on Forensic Capacity and Illicit Drugs under the UNODC Regional Programme for Afghanistan and Neighboring Countries. This group brings together forensic experts and counter-narcotics investigators to review cases, share information and develop cooperation.

This broad international engagement was combined with the promotion of bilateral partnerships between the Forensic Service and foreign, accredited forensic bureaus. International forensic experts conducted required needs assessments at the start of the project. The Forensics Service benefited from exchange visits to Serbia and Georgia. As a result, the SFS and the National Forensic Bureau of Georgia are now collaborating in a structured manner. Georgian experts are providing mentoring support and sharing their experience with the implementation of a quality management system to comply with ISO 17025 requirements and providing capacity development on the four selected types of forensic expertise: handwriting, technical expertise of documents, narcotic drugs, and chemicals.

6. Lessons learned and suggested follow up

The project faced several challenges during implementation:

- Turnover at the helm of the Forensics Service and the appointment of various chairpersons during the lifetime of the project, resulted in varying levels of commitment and slowed down progress on the path to international accreditation, with the project having to invest in renewed discussions and agreement on the work plan.

- The reconfiguration of the Forensics Service as the only government executive body responsible for the development and implementation of the forensic policy/expertise in the country directly under the Government proved politically sensitive. Overall management capacity and state funding to oversee such processes remains low. A concept for the development of forensic services initiated by the Government was suspended. Time and effort spent to discuss the possible transfer of other laboratories, such as those of the Ministry of Health and Interior, to the Forensics Service (which, in the context of the 2021 constitutional reform and a changed government structure, has now been placed back under the supervision of the Ministry of Justice) diverted attention and resources away from critical work to advance international accreditation.

The project produced four (4) analytical reports to capture lessons learned from implementation in this political and institutional context:

- Analytical review with recommendations for the development of forensic services in Kyrgyzstan.
- Policy paper on the establishment of a comprehensive and sustainable forensic expert training system.
Policy paper on coordination and partnerships, including recommendations for the establishment of an inter-agency Coordination Council on Forensic Services.

Overview of technical assistance provided by UNODC.

These reports recommend further work to establish unified control over the quality and timeliness of forensic examinations, adopt a unified approach to training of forensic experts, and develop forensics related research.

A clear gap identified in the papers, something not addressed by the project, relates to the poor quality of crime scene investigations and the problem of the broken chain of custody of evidence in criminal investigations. Streamlining legal and organizational frameworks for proper crime scene investigation is needed so that the evidence brought to the Forensics Service is not contaminated.

Other new elements include the need to develop independent, public control and oversight over the Forensics Service and forensic services in general. Creating an Interdepartmental Coordination Council is recommended to improve interagency cooperation on forensics activities with the participation of all forensic service providers and consumers, including criminal justice institutions. Non-state forensic services could be strengthened further by optimizing norms governing their functioning and reviewing restrictions on the types of forensic expertise they can conduct.

To stay the course on accreditation, it is suggested that future project interventions and efforts to strengthen forensic services in Kyrgyzstan prioritize:

- Continued mentoring by accredited foreign forensics laboratories on the 4 selected types of expertise.
- Refresher training on quality management based on the ISO/IEC 17025 standard and its requirements for the competence of testing and calibration laboratories.
- Institutionalization of standard operating procedures and training on specific ISO/IEC 17025 related topics, such as metrological traceability; use of reference material and control samples; method validation and planning of actions to ensure the validity of test results.
- Implementation of a training program on the ISO/IEC 17020 standard, which guides the work of crime scene investigation units.
- Contracting a forensic institution to do the peer review and accredit the SFS for the selected types of expertise.
- Organize a regional forensics conference to share best practices from other countries in the region, including Kazakhstan, Uzbekistan (which received its first accreditation certificates in 2020 as facilitated by UNODC with INL support) and Turkmenistan (which is advancing at swift pace thanks to another UNODC/INL forensics project).

Building on the recommendations made in the analytical papers, future project interventions should also incorporate new elements, such as support to:

- Development and implementation of a roadmap for development of non-state forensics and related capacity development of these entities, which is expected to help improve the overall quality of forensic services and diversify their availability for all participants in the criminal process to ensure equality of arms and adherence to fair trial standards.
- Establishment of a coordination council on forensic services and a public council under the Forensics Service to improve coordination and enhance public participation and involvement of civil society and universities in forensics-related policymaking.
- Integrated information management on forensics linked up with the country’s unified electronic crime registry. This could include a fingerprints database and a register of tangible evidence, including for controlled substances, such as narcotic drugs and psychotropic substances, and for biological evidence in sexual and gender-based violence cases.
## 7. List of publications

### 2014

<table>
<thead>
<tr>
<th>Publication</th>
<th>Description</th>
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<tbody>
<tr>
<td>Needs Assessment of the State Forensics Center under the Ministry of Justice of the Kyrgyz Republic.</td>
<td>Оценка потребностей Государственного центра судебных экспертиз при Министерстве юстиции Кыргызской Республики. Отчет обзорной миссии.</td>
</tr>
<tr>
<td>Towards International Accreditation of the State Forensics Centre under the Ministry of Justice of the Kyrgyz Republic – Study on Compliance with International Standards (ISO 17025)</td>
<td>Отчет о результатах обследования Государственного центра судебных экспертиз при Министерстве Юстиции Кыргызской Республики на предмет его подготовки к аккредитации по международному стандарту ISO 17025</td>
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### 2016

<table>
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<tr>
<th>Publication</th>
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<tr>
<td>Training Curriculum of the State Forensic Center under the Ministry of Justice of the Kyrgyz Republic for 2015 - 2018</td>
<td>Учебный план Государственного центра судебных экспертиз при Министерстве юстиции Кыргызской Республики</td>
</tr>
<tr>
<td>Training Manual: forensic handwriting examination</td>
<td>Учебное руководство: судебно–почерковедческая экспертиза</td>
</tr>
<tr>
<td>Training Manual: forensic document examination</td>
<td>Учебное руководство: судебно-техническая экспертиза документов</td>
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### 2017-2018

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<thead>
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<th>Publication</th>
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<tr>
<td>5 Training modules on the following types of pilot forensic expertise:</td>
<td>5 Учебных модулей по следующим видам пилотных экспертиз:</td>
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<tr>
<td>• handwriting and signatures,</td>
<td>• Исследование почерка и подписей,</td>
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<td>• impressions of seals and stamps,</td>
<td>• Исследование оттисков печатей и штампов,</td>
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<td>• luminescent materials,</td>
<td>• Исследование наркотических средств,</td>
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<tr>
<td>• phosphors,</td>
<td>• Исследование люминофоров,</td>
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<tr>
<td>• ballistics,</td>
<td>• Баллистическое исследование.</td>
</tr>
<tr>
<td>11 Standard Operating Procedures for the above-mentioned pilot types of forensic expertise</td>
<td>11 стандартных операционных процедур (СОПов) для вышеуказанных 5 пилотных видов экспертиз.</td>
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### 2020

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<tr>
<th>Publication</th>
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<tr>
<td>Analytical review with recommendations for the development of forensics in the Kyrgyz Republic</td>
<td>Аналитический обзор с рекомендациями дальнейших шагов по развитию судебно-экспертной деятельности в Кыргызской Республике</td>
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<tr>
<td>Review of technical assistance provided by UNODC/INL</td>
<td>Обзор технической помощи оказанной УНП ООН/INL</td>
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<tr>
<td>Analysis of the professional training of forensic experts</td>
<td>Анализ профессиональной подготовки судебных экспертов</td>
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<tr>
<td>Overview paper on the Interdepartmental Coordination Council on forensics</td>
<td>Обзорный документ о Межведомственном координационном совете</td>
</tr>
<tr>
<td>Compilation of articles on forensic science services in the Kyrgyz Republic published online in 2019-2020</td>
<td>Сборник статей о судебно-экспертной деятельности в Кыргызской Республике, опубликованных в Интернете за 2019-2020 гг.</td>
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