ORIGINAL

Tender in Response to Invitation to Tender Number 4301-5/2013-2

SELECTION OF TENDERER TO DELIVER PROFESSIONAL CONSULTING SERVICES AND ACCESS TO THE SOFTWARE FOR THE IMPLEMENTATION OF COMPLEX MULTIOBJECT MULTIROUND ELECTRONIC AUCTION FOR AWARDING RADIO FREQUENCIES IN THE 800 MHz, 900 MHz, 1800 MHz, 2100MHz AND 2600 MHz FREQUENCY BANDS

APEK

Prepared for:

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1.0 PRESENTATION OF THE TENDER TEAM

As the regulator of Slovenia radio-frequency spectrum, the Post and Electronic Communications Agency of the Republic of Slovenia (APEK) is seeking expert Consultancy Services and a turnkey solution for their upcoming multiband auction of frequencies in the 800 MHz, 900 MHz, 1800 MHz, and 2600 MHz bands, as well as the available frequencies in the 2100 MHz (TDD) band in early 2014.

An effective solution for APEK can only be delivered by a team that brings deep experience in game theory and auction design and rules, proven auction software and hosting services, subject matter expertise in the spectrum industry, and a flawless history of conducting complex, multiobject/ multiround electronic auctions. We are pleased to present such a team. Computech, a leading system integrator firm with over 34 years of experience in government contracting and 19 years of auction experience, will serve as APEK's prime contractor, and will partner with Auction Technologies to meet APEK's needs for an auction solution. Figure 1 depicts details about the two companies.

Company	Capabilities	Roles and Responsibilities
Computech, Inc	• Prime contractor with 34 years of government contracting experience • 19 years of auction experience • Flawless record of delivery of auction systems around the world • Project leadership and staff that have led the delivery of electronic auctions in the U.S., Europe, and Mexico • Upcoming auctions in Australia and the Middle East	• Project management • Primary APEK point of contact • Computech Auction Platform (CAP) auction software • Hosting services • Mock and live auction support • Contract administration
Auction Technologies, Inc. (ATI)	• Proven auction advisory experience to regulators and bidders • Subject matter experts in auction design and rules • Game theorists for spectrum design issues and rules	• Auction format analyses • Auction design recommendations • Draft Tender Documentation support • Post-auction analysis

Figure 1 – The Computech Team

We present a brief description and relevant experience for each company on the Computech Team below.

Widely recognised as one of the preeminent developers of auction systems in the world, Computech has earned an impeccable reputation for providing its clients with quality technical support and innovative design ideas. An information technology (IT) firm based in the United States, and headquartered in Maryland, just outside of Washington, D.C., Computech pioneered the application of automated spectrum auction systems in the mid-1990s and offers more than 19 years of spectrum management experience to APEK.

Exceptionally skilled in auction theory, business process, training, design, procedures, auction software infrastructure, implementation and operations, and technical support, Computech's international spectrum qualifications are considerable. For example, in 2011, Computech supported Sweden's Post and Telecom Agency's (PTS) 800 MHz auction, customising and deploying a version of our auction software service, the Computech Auction Platform (CAP). We have also supported COFETEL's auctions program since the mid-1990's. In fact, we deployed CAP for COFETEL in 2009, following an advising period on policy, auction design, and auction rules.

Countries where the firm's spectrum auction practice is currently pre-qualified to provide IT support.

Today, the Finnish Communications Regulatory Authority (FICORA) is using CAP to operate their current 800 MHz auctions and the Australian Communications and Media Authority (ACMA) is using CAP as a prototype to test their generic auction rules and train their staff, with a goal of using CAP for an auction in the near future. Computech is also providing CAP and hosting services to support the Telecommunications Regulatory Authority (TRA) of the Kingdom of Bahrain in conducting its auction for 800, 1800, 2100, and 2600 MHz spectrum.

In the last several years, Ofcom in the United Kingdom, Industry Canada, and the PTS have awarded supply agreements that allow Computech to support their spectrum auction programs. Additionally, the firm provided support to Thailand's Post and Telegraph Department by leading spectrum frequency management projects and deploying a comprehensive system that effectively streamlines the process of assigning radio spectra, maintains accurate information regarding active broadcast facilities, and performs the necessary engineering to ensure interference-free broadcasting. Furthermore, our staff at the Federal Communications Commission (FCC) has met with representatives from various countries such as Canada, Russia, Brazil, Peru, Yemen, and Jamaica to provide guidance and direction relative to the policies, procedures, technologies, and the economics supporting spectrum auctions.

Of particular note, Computech has been responsible for designing and operating over 80 auctions at the FCC in the U.S. since 1994. We led the full software development life cycle of the FCC original Automated Auction System (AAS) in 1994 and designed and developed its state-of-the-art Integrated Spectrum Auction System (ISAS) in 2005. Since its first automated auction in 1994, Computech-designed, operated, and maintained systems that have allowed the FCC to allocate 68,496 licenses over 5,574 rounds of competitive bidding; auctions that have tallied $87,158,892,515 in gross winning bids. This includes 2008's 700 MHz auction that ran for 261 rounds and raised $19.6 billion, more money than any auction in the FCC's history and almost doubled original estimates. It also includes four 800 MHz auctions – 800 MHz Specialised Mobile, 800 MHz SMR General Category, 800 MHz SMR Lower 80, and 800 MHz Air-Ground. We recently completed software and support for the FCC's first reverse auction and today are working on upcoming incentive auction designs.

Auction Technologies

Our subcontractor, Auction Technologies Inc. (ATI), is a privately held firm located in Massachusetts in the U.S. They specialise in auction consulting services including auction design and management to businesses, governments, and other market participants to create efficient markets to maximise the value of their transactions. ATI also advises bidders participating in auctions on bidding strategy, valuations, competitive assessments and assist them with war room management support.

ATI'S team includes some of the world's most renowned auction experts and experienced practitioners who have been involved in the design and implementation of the highly successful and innovative auctions used to date in the telecommunications, energy, and related industries. ATI was involved in the rule-making for the first Simultaneous Multiple Round Auction (SMRA) in the U.S., virtually all the European 3G and now 4G auctions, as well all the major spectrum auctions in Asia and the Americas. They bring world auction theory expertise to the Computech Team including unparalleled experience on both the auction management side and the bidder side.

ATI's consulting services include: policy development for auctioning of radio spectrum; review of auction design and rules, monitoring of spectrum allocation processes, and review of auction rules, latest advances in spectrum auction design and related economic theory; and bidder support services for spectrum auctions as well as auctions in other industries. ATI experts have significant expertise working with governments and regulators around the world on the design of auctions and on spectrum management reform including the spectrum authorities in Canada, Italy, Singapore, the U.S., the U.K., Australia, India, Mexico and several other countries on a wide variety of projects.

In particular, when advising a client on auction design and management, ATI provides has expertise in providing the following services:

- Evaluate alternative auction designs and provide recommendations on the ideal auction format, such as Simultaneous Multiple Round (SMR), Combinatorial Clock Auction (CCA), and Clock Auction to best achieve the client's goals and objectives (i.e., revenue maximisation, cost savings, transparency, price discovery, ease of use, and regulatory approval)
- Plan and implement all the steps, stages, and tasks to guide agencies' spectrum allocation events
- Write the detailed auction rules
- Advise on the consultative process with potential bidders
- Advise on promotion of the auction to existing players and potential new-entrants
- Advise on the pre-qualification process and evaluation
- Write detailed auction procedures leading to a smooth administration of the entire process
- Assist clients with auction rules translation into the software
- Assist clients with software testing for compliance with the auction rules
- Train clients' staff in the overall administration of the process
- Act as independent auction manager to guarantee the integrity of the process
- Assist clients with testimony and expert witness support with respect to auction design and other regulatory matters

A list of ATI's relevant experience with regulators follows:

- Advised Telecommunications Regulatory Authority of India (2006)
- Provided auction manager team for Illinois Descending Clock Auction for energy purchase (2006)
- Advised Industry Canada on 2300 MHz/3500 MHz auction (2003–2004)
- Advised UK Radiocommunications Agency on spectrum trading (2002)
- Advised Netherlands DGTP on design of auction for sale of AM and FM frequency rights (2001–2002)
- Provided auction manager team for New Jersey BGS Descending Clock Auction and original design team (2001- 2006)
- Designed and managed IDA Singapore auctions for the sale of 3G spectrum (2001)
- Designed and managed IDA Singapore auctions for the sale of wireless local loop (2001)
- Advised Italian Ministry of Communication in design of 3G auction (2000)
- Conducted FCC experimental testing of combinatorial auction mechanisms (2000)
- Advised Australian ACA on 3G auctions (2000)
- Advised Industry Canada on spectrum auctions for LMCS frequencies (1996) and 24/38 GHz frequencies (1999)
- Advised Colombia (Ministry of Communications) in draft auction legislation for first spectrum auctions (1999)
- Designed and implemented first spectrum auction for trunk radio frequencies for the Guatemalan Superintendent of Telecommunications (1997)

- Designed and implemented first spectrum auction for paging licenses for the Mexican Ministry of Communications (SCT) (1996)
- Advised Australian SMA on design of 500 MHz spectrum auction (1996)
- Led team that developed auction software adopted by Industry Canada (1995), the Mexican Ministry of Communications and Transport (1995), and the Guatemalan Superintendent of Telecommunications (1996 – 1997)

ATI's relevant experience on the bidder side is equally compelling. A list follows of their bidder strategy advisory for spectrum auctions:

- Canada 4G auction (ongoing)
- Netherland 4G auction (2012)
- Belgian 4G auction (2012)
- Switzerland 4G auction (2012)
- Greece 3G auction (2011)
- Italy 4G auction (2011)
- Spain 4G auction (2011)
- Portugal 4G auction (2011)
- France 4G auction (2011)
- German 4G + multi-band auction (2010)
- India 3G auction (2010)
- Brazil 3G auction (2010)
- Mexico 3G auction (2010)
- Hong Kong 3G/4G (2009)
- UK 10-40 GHz (2008)
- Canada AWS auction (2008)
- Brazil 3G auction (2007)
- US 700 MHz auction (2007)
- US AWS auction (2006)
- US Auction 58 Broadband PCS (2005)
- US 700 MHz auction (2Q 2003)
- Taiwan 3G auction (4Q 2001 - 1Q 2002)
- US PCS Auction 35 C and F Blocks (2001)
- Australian 3G auction (2001)
- US 700 MHz combinatorial auction (3Q 2001)
- Danish 3G auction (2Q 2001)
- Australian PCS auction (2000)
- UK 3G auction (2000)
- Italian and Brazilian 3G auction (2000)
- Dutch 3G auction (2000)
- Canadian LMDS auction (1999)
- US PCS Auction 22 C, D, E, and F Blocks (1999)

- Australian PCS auction (1998)
- Telebras privatisation (1998)
- Mexican PCS auction (1997-1998)
- Dutch DCS 1800 auction (1997-1998)
- Brazilian B block cellular sale (1996-1997)
- US PCS Auction 5 C Block (1995-1996)
- US SMR (trunk radio) auction (1995)

2.0 REFERENCES

In this section, Computech presents its references as evidence for meeting the following APEK requirements:

- Experience with development and execution of complex auctions involving multiple objects and multiple rounds in the last 5 years
- Capability to provide auction software for complex multiple objects and multiple round auctions
- Knowledge and experience in the areas of auction, spectrum regulation, and wireless communication markets

Appendix H contains Reference Certificates signed by the organisations that ordered the services. Each certificate contains:

- Project Title
- Brief Description of the Project
- Project Budget
- Project Duration (start and end dates of the project)
- Contact Person (name, email address, and telephone number)

In Figure 2, we map the criteria in the Invitation to Tender to the certificates in Appendix H by project name.

Criteria	Certificate Project Name to Prove Reference
References on Projects for Authorities Acting as Auctioneers:	
The leader in last 5 years in complex spectrum auction project of European regulator for electronic communications as auctioneer.	• Auction Consulting Services (800 MHz band) for the Swedish Post and Telecom (PTS) • Spectrum Auction Software and Consultation Services for the Finnish Communications Regulatory Authority (FICORA)
The leader in last 5 years in public 800 MHz auction projects of European regulator for electronic communications as auctioneer.	• Auction Consulting Services (800 MHz band) for the Swedish Post and Telecom (PTS) • Spectrum Auction Software and Consultation Services for the Finnish Communications Regulatory Authority (FICORA)
The leader in public mobile services complex spectrum auction project of non-European regulator.	• Auction Support Services for the Federal Communications Commission (FCC) • Spectrum Auction Software and Consultation

	Services for the Comisión Federal de Telecomunicaciones (COFETEL)
Involvement as partner in public mobile services complex spectrum auction project of non-European regulator, whose share has to be at least 20 % of the value of the whole project.	• Auction Spectrum Software and Services for the Telecommunications Regulatory Authority (TRA) of the Kingdom of Bahrain
References Related to Bidders:	
The leader in complex spectrum auction project of European regulator for electronic communications as a bidder in last 5 years.	• Austria 4G auction (T-Mobile) • Germany multi-band auction (KPN) • Netherlands multi-band auction (KPN) • Belgian 4G auction (KPN)

Figure 2 – Mapping of Invitation to Tender Criteria to Certificates in Appendix H

The Reference Certificates in Appendix H only contain a brief description of each project. Therefore, we provide a more detailed description for each project in the following sections to demonstrate our experience and capability with complex auctions as desired by APEK.

2.1 Auction Support Services for the Federal Communications Commission (United States)

Government Regulator: U.S. Federal Communications Commission (FCC)
445 12th Street SW
Washington, DC 20554 USA

For 80 of the 82 spectrum auctions the FCC has conducted to date, Computech has served as the full auction solutions provider. From auction design consultation, through system design, development, and live auction support, the FCC continues to select Computech as their trusted advisor.

Computech built the FCC's groundbreaking, original auction system in 1994. By developing, implementing, and operating spectrum auctions over the Internet, our work enabled the FCC to become the first regulator to fully automate the spectrum auction process. Initially engaged by the FCC on a three-month contract to evaluate and advise on spectrum auction policies and methods, our relationship quickly expanded, with our firm developing the auction software that met every FCC requirement for a fully automated, completely transparent, and accurate bidding system.

The FCC's original system, known as the Automated Auction System (AAS) ran multiple, concurrent auctions using a SMRA auction design and provided bidders and the public with immediate feedback on current auctions as well as full access to archived auction data. After it was deployed, our staff maintained the AAS for the FCC and continued to enhance the system to meet the FCC's needs as they evolved. Improvements included implementing bidder messaging for communicating auction announcements, incorporating refinements in bidding methodology based on advances in auction theory, and integrating the AAS into user registration, accounting, licensing, and other FCC legacy

systems. In all, the system successfully conducted 33 auctions covering in excess of 2,700 rounds of bidding and bringing in nearly $42 billion in bids over its seven years in production.

Building on the success of AAS, the FCC again entrusted Computech's team to evaluate and advise on spectrum auction policies and methods prior to contracting with our staff to build their current Integrated Spectrum Auction System (ISAS) in 2005. This evolutionary, web-enabled system uses a single Internet-based control module to manage the entire auction process from the application of prospective bidders through the auction to the assignment of winning bidders. Computech custom-built ISAS with the flexibility to conduct auctions using all the features of the FCC's non-package auctions as well as the newly developed combinatorial auctions. Doing so allowed the firm to deliver a new system with unparalleled scalability and versatility.

Through all of this time, Computech has also led an active Auction Operations Research (AOR) team at the FCC focused on new auction design, theory, and implementation in order to expand upon the SMR auction design to include options for package bidding and pricing, activity, and winner determination mechanisms for the potential impact in terms of auction efficiency, revenue, and computational complexity. Computech's AOR group has developed numerous fully functioning auction systems, including:

- *Extended SMR Auctions* – The research team developed a new package bidding mechanism, which seeks to provide greater flexibility to the bidders by not limiting the packages to satisfy a hierarchical structure. This design permits more pre-created packages, as long as the maximum number of possible allocations allows for easy computations. The novel pricing scheme computes the price of each package in a round to be the maximum possible revenue based on all current bids on the package as well as any of the sub-packages or licenses that comprise it. The design retains all the features of an SMR auction, and allows for license or package bid withdrawals with penalties in order to allow bidders with multiple business plans to overcome any residual exposure risks.
- *Clock Auctions* – Economic experiments have shown that clock auction mechanisms may provide a bidding framework to overcome the exposure problem, without introducing a threshold problem whereby bidders have difficulty coordinating their bids to overcome a large package bidder. Clock designs are computationally and conceptually simpler auction formats that are resistant to collusive and other strategic behaviors. Several variations of clock auction designs exist. Our AOR team built a web-enabled, prototype software tool, called the Fungible Auction Simulation Tool (FAST), which allows simulations and experimental studies of clock auctions with both human bidders and automated bidding agents. FAST provides a platform for testing and evaluating clock auction designs with different mechanism options and settings for auction parameters.
- *Reverse Auctions for Universal Service* – The research group has studied the viability of reverse auctions for subsidies to extend quality telecommunications services to all parts of the nation at fair, reasonable, and affordable rates. Reverse or subsidy auctions are market-based

mechanisms with considerable potential to reduce costs of providing universal service by encouraging competition and use of cost-effective and innovative technologies

- *Spectrum Band Restructuring Auction Exchange* – The research group developed a proposal describing the details of a multi-round exchange auction framework for buyers and sellers. The design allows traders to submit bundle orders with a single price for execution of a collection of buys and sells. The proposal laid out the design for a web-enabled prototype auction system with both human and automated agent software to enable experimental and simulation studies of the framework.

As FCC's auction design consultants, our team served as an integral member of the advising team that FCC relied on to shape and draft their auction policy, rules, and procedural notices for public release. The U.S. faced a unique set of constraints for this auction in trying to maximise population coverage, provide access for both regional and nationwide players, and satisfy competing policy directives from industry, government, and public safety interest groups. Many of the auctions-related policy decisions made by the FCC were based on the results of our economic simulations and experiments. Computech produced extensive summary report findings and recommendations supported by hard data.

Once the FCC published their final rule makings and policy notices, Computech designed, developed, and implemented the enhanced ISAS with a new set of features to support a Hierarchical Package Bidding auction design, allowing bidders to bid on pre-created packages of items. Our team also built in a wide range of features to add flexibility to the auction system, allowing the FCC to be able to respond to last minute changes in legislation passed down by Congress. We accomplished all of this in just under six months to meet a government-imposed deadline in support of the DTV transition.

The FCC and Computech shared in the success of completing the 700 MHz auction in preparation for the DTV transition, serving as the first step in accomplishing the U.S. Broadband initiative. Computech, to this day, remains as FCC's trusted advisor and system implementer in support of the U.S. National Broadband plan. As the need for the next U.S. broadband-related auction draws closer, Computech's team is actively working with the FCC to determine the appropriate auction design. Computech recently provided support for the FCC's Mobility Fund auction using the reverse auction format.

2.2 Auction Consulting Services (800 MHz band) for the Swedish Post and Telecom Agency (Sweden)

Government Regulator: The Swedish Post and Telecom Agency
Box 53498
SE-102 49 Stockholm

Sweden's telecommunications regulator, the Swedish Post and Telecom Agency (PTS), awarded Computech with a contract for auction consulting services and software in support of their 800 MHz band auction. In March 2011, Sweden's auction for the 800 MHz band, which is divided into six paired

frequency blocks of 2x5 MHz each and suitable for wide area coverage in sparsely populated areas, was conducted using a customised version of the Computech Auction Platform (CAP) addressing PTS's specific auction design and rules.

Our effort in Sweden is extremely similar to APEK's needs – short-term and prompt auction capability using a configurable internet-based auction software service to run a multiobject, multiround auction. We kicked off the project in Sweden in November 2010 and provided a working prototype using CAP, our auction platform software, by December 2010. We conducted training in January 2011 and a mock auction in February 2011. The live auction began the end of February 2011 and ended the first week of March 2011. We performed the majority of the work remotely from the U.S. but we did travel to Sweden for the live auction. The auction event was successful – error-free and no support calls from the bidders.

Sweden auctioned their 800 MHz band spectrum using a Simultaneous Multiple Round Ascending auction (SMRA) format with switching rules. Computech adapted our auction platform to accommodate PTS's specified requirements for the auction design implemented. Our team of consultants, developers, and analysts were intimately involved throughout the 800 MHz auction process including:

- Policy and design decisions, including selection of appropriate auction format; reserve / starting prices, and assigned point (i.e. lot rating) values for the licenses to be auctioned; required activity and stage transition percentages for each stage of the auction; and auction and bidder-level spectrum caps
- Information technology infrastructure, including the implementation of an auction system fulfilling reliability and restart procedures; secure authentication of bidders and PTS over the internet; along with administrative, bidding, and public interfaces providing the ability for various users to monitor, manage, analyse, and participate in the auction

Key factors PTS faced were the use of Spectrum Caps as a way to control bidding activity, along with the ability of bidders to perform bid switching. PTS placed a cap on the each bidder's eligibility (in points) prior to the auction. Each of the six lots offered in the 800 MHz auction were assigned one point, and each bidder was eligible to be active on lots totaling a maximum of two points throughout the auction.

In order to maintain bidding flexibility, Computech readily implemented logic allowing for bid switching capabilities, according to the requirements set forth by the PTS. Bid switching is achieved by making a bid on one or more lots on which the bidder does not have a bid and cancelling one or more bids on lots in the same round. The number of points associated with the new bids and the number of points associated with the cancelled bids must be of equal value. At the end of each round, CAP produced bidder specific reports detailing bidding activity during the round (bids, switches, canceled bids, etc.), bid status, and next round prices.

Prior to the live auction, Computech's team was onsite in PTS' Stockholm offices to lead internal system training; conduct mock auctions for the bidders, using CAP, allowing bidders to experiment with auction

rules, strategy, and system interaction; and for auction support during the live production event. Our team provided PTS with all bidder training material, including a bidder manual, which is a step-by-step guide through all of CAP's features and functionality.

2.3 Spectrum Auction Software and Consultation Services for the Comisión Federal De Telecomunicaciones (Mexico)

Government Regulator: Comisión Federal De Telecomunicaciones
Bosque de Radiatas # 42
México, D.F. 05120

For over a decade, Computech has supported auctions for the Mexican Government. Computech first established a partnership with Comisión Federal de Telecomunicaciones (COFETEL) in 1995, when it was selected to customise a licensed version of the FCC's Automated Auction System (AAS). We have served as a primary auction solution provider for COFETEL since that time, delivering three custom auction systems. During this timeframe, we expanded our relationship with COFETEL, based on our continued success, to provide auction policy and design consulting services in addition to auction system services.

To support Mexico's spectrum auction plans, we deployed a new version of our auction platform, CAP, for COFETEL in 2009. COFETEL selected the Computech team to provide full auction life cycle support, from initial auction policy, design, and format consultation, through system customisation, and live auction conduct and support. As regulators worked to prepare for their planned upcoming spectrum auctions, COFETEL relied on Computech for advice and counsel. We provided recommendations on critical auction details including policy and design decisions, including selection of appropriate auction format; rules and parameters for legal notices and official auction rules; reserve prices, minimum opening bid amounts, and assigned point values for the licenses to be auctioned; and required activity and stage transition percentages for each stage of the auction.

Once COFETEL finalised their auction rules and related settings and parameters, Computech adapted the SMRA-base of our auction platform to meet their exact needs to best support the pertinent economic and policy related issues, as well as to sustain all future spectrum auctions in Mexico. The solution we delivered shares many features APEK seeks, including:

- a configurable internet-based auction system implemented to allow for variations in auction parameters, such as competition limits, bidder eligibility, reserve price, auction stages, and duration of rounds
- a configurable auction manager interface permitting an auction administrator to create, configure, monitor, manage, and analyse the auction enabling them to control the bid increment percentages (fixed or activity-based, depending on auction setting) as well as the number of bid increments to display and the bid increment percentage during the course of the

auction for all licenses (if bid increments are used), based on levels of auction activity and bidding behavior

- a configurable bidder interface consisting of a clock function, starting/minimum bid amounts, bidder details, bid history, notifications for bidders from the auction manager, and a means for bidders to track their progress in the auction
- a public interface providing the general public access to certain auction information including auction date and time, round results, and various auction details

A key economic factor COFETEL faced concerns the use of Spectrum Caps as a way to limit bidding eligibility for each participant within a particular geographic region, assessed in terms of a participant's initial MHz holdings (prior to the auction), and MHz associated with both standing high bids in a geographic region and new bids. Computech readily incorporated logic into CAP to handle spectrum caps (MHz) automatically, including the ability to notify bidders in real-time of ineligible bids due to spectrum caps.

After deploying the auction system, the Computech team went onsite in Mexico City to lead hands-on training with COFETEL staff for conducting the full auction life cycle with the new system. These training sessions covered such topics as creating and setting up an auction, managing a live auction (e.g. round schedule, bid settings, announcements), and analysing and validating reports. We delivered related training manuals, operating procedures, and user's guide to support the delivery of the auction system. Computech then supported internal mock auctions as part of the user acceptance phase.

Ultimately, in May 2010, the Computech team initiated COFETEL's recent two parallel auctions (Auction 20 and Auction 21) onsite with the COFETEL auction team and auction participants. With CAP, COFETEL generated more than $8.2 Billion Mexican pesos in combined high bid amounts from the two auctions, over a course of 163 rounds and 30 bidding days.

Computech delivered a leading-edge auction solution for COFETEL to ensure the Mexican government could provide spectrum services that incorporated modern auction design and methodology, as well as conformed to international best-practices. This same consultation and customisation process, as fully accepted by key COFETEL stakeholders, serves as prime experience in furthering Computech's ability to deliver a similar solution to support FICORA 's spectrum auction program.

2.4 Spectrum Auction Software and Consultation Services for the Finnish Communications Regulatory Authority (FICORA)

Government Regulator: The Finnish Communications Regulatory Authority
Itamerenkatu 3 A
Box 313
FI-00181 Helsinki

Finland's telecommunications regulator, the Finnish Communications Regulatory Authority (FICORA), awarded Computech a contract for auction consulting services and software in support of their 800 MHz band auction. Finland's auction for the 800 MHz band, which is divided into six paired frequency blocks of 2x5 MHz each, began using a customised version of the Computech Auction Platform (CAP) addressing FICORA's specific auction design and rules.

Our effort in Finland consisted of a short-term and prompt auction capability using a configurable internet-based auction software service to run a SMRA auction. We kicked off the project in Finland in August 2012 and delivered CAP in November 2012. After deploying the auction system, Computech led training with FICORA staff for conducting the full auction life cycle with the new system. These training sessions covered such topics as creating and setting up an auction, managing a live auction (e.g. round schedule, bid settings, announcements), and submission of bid activity (placing bids, switching bids, cancelling bids, placing waivers). We developed user guides to support the delivery of the auction system.

Finland auctioned their 800 MHz band spectrum using a Simultaneous Multiple Round Ascending auction (SMRA) format with switching rules. Computech adapted our auction platform to accommodate FICORA's specified requirements for the auction design implemented. The solution we delivered included:

- an auction management interface permitting the auction manager to create an auction, manage the auction schedule, control minimum bid increment percentages on lots, submit bids lots on behalf of a bidder, and communicate with bidders.
- a bidder interface consisting of a clock function, starting/minimum bid amounts, bid history, and notifications for bidders from the auction
- an information technology infrastructure, including the implementation of an auction system fulfilling reliability and restart procedures; along with secure authentication of bidders and FICORA over the internet

Key factors FICORA faced were the use of Spectrum Caps as a way to control bidding activity, along with the ability of bidders to perform bid switching. FICORA placed a cap on the each bidder's eligibility (in points) prior to the auction. Each of the six lots offered in the 800 MHz auction were assigned one point, and each bidder was eligible to be active on lots totaling a maximum of three points throughout the auction. In order to maintain bidding flexibility Computech readily implemented logic allowing for bid switching capabilities, according to the requirements set forth by FICORA. At the end of each round, CAP produced bidder specific reports detailing bidding activity during the round (bids, switches, canceled bids, etc.), bid status, and next round prices.

Of particular interest to FICORA was for the system to support multiple languages, ability to manage bidder access to information depending on the phase of the round, and to view bid submission and

revenue generation graphically. Computech's auction platform was entirely configurable and capable of meeting each of these requirements set forth by FICORA. As a result the auction software:

- included a mechanism to allow bidders to switch between English, Finnish, and Swedish languages from anywhere within system
- incorporated three phases (Reporting, Bidding, and Processing) into a round. The duration of each of these phases, along with the duration of the round, was controlled completely by the auction manager. Each phase restricted bidder functionality within the bidding system. For example, during the reporting and processing phases bidders could access the system, but were unable to view or submit bids.
- allowed an auction manager to generate a report providing a graphical representation of bids submitted and revenue growth over the course of the auction on a round by round basis

Computech performed the majority of the work remotely from the U.S. and traveled to Finland in support of the mock and live auctions. We provided onsite support for the mock auction and first two months of the live auction. Today we provide remote support as the auction continues.

2.5 Auction Spectrum Software and Services for the Telecommunications Regulatory Authority (TRA) of the Kingdom of Bahrain

Government Regulator: Telecommunications Regulatory Authority of the
Kingdom of Bahrain
5th Floor
Building No. 852
Road No. 3618
Seef 436
Manama, Kingdom of Bahrain

As a subcontractor to Frontier Economics, Computech is providing auction consulting services and software to the Kingdom of Bahrain's telecommunications regulator, the Telecommunications Regulator Authority (TRA), for their auction of frequency licenses in the 900, 1800, 2100, and 2600 MHz frequency bands. This particular auction contains a mixture of specific lots having frequency assignments associated with them, and generic lots whereby no frequency assignment is allocated to the lots during the bidding phase.

Our effort in the Kingdom of Bahrain consists of a short-term and prompt auction capability using CAP. We kicked off the project in February 2013 and delivered CAP in March 2013. After deploying the auction system, Computech led training with staff from the Kingdom of Bahrain for conducting the full auction life cycle with the new system. These training sessions covered such topics as creating and setting up an auction, managing a live auction (e.g. round schedule, bid settings, announcements), and submission of bid activity (placing bids, removing bids, and placing waivers). We also delivered user guides to support the delivery of the auction system.

Computech adapted our auction platform to accommodate the Kingdom of Bahrain's specified requirements for the auction design implemented. The solution we delivered included:

- an auction management interface permitting the auction manager to create an auction, create lot settings (bid increments, minimum acceptable bid amount percentages) on a lot by lot basis, manage the auction schedule, and communicate with bidders.
- a bidder interface consisting of a clock function, starting/minimum bid amounts, bid history, and notifications for bidders from the auction
- an information technology infrastructure, including the implementation of an auction system fulfilling reliability and restart procedures; along with secure authentication of bidders and the Kingdom of Bahrain over the internet

Of particular interest to the Kingdom of Bahrain was how the use of waivers had a direct effect on a bidder's eligibility over the course of the auction. Specifically, during the course of the auction if a bidder does not meet their activity requirement in the round then the system will automatically reduce the bidder's eligibility in the next round. However, if a bidder submits bids below their activity requirement, and submits a waiver proactively in the round, then the system will retain the bidder's eligibility in the next round. Additionally, if a bidder does not submit a bid in the round, then the system automatically submits a waiver on their behalf. Under this scenario, the system retains the bidder's eligibility in the next round.

Computech performed the majority of the work remotely from the U.S., and traveled to Bahrain to conduct internal training of the administration and bidding interfaces. The auction is scheduled to start in the near future at which time we will provide onsite support.

2.6 Multiple Bidder Strategy Projects

ATI performed the following tasks for T-Mobile for Austria's 4G auction, KPN for Germany's multi-band auction, KPN for Netherland's multi-band auction, and KPN for Belgium's 4G auction:

- Advised on bid strategy (ATI provided a lead game theorist)
- Worked with the clients to draft an auction playbook
- Developed war room procedures
- Conducted core analysis of auctions rules
- Assisted with drafting comments to the regulator on auction rules
- Developed core bid tracking tools used by the bidder to analyse round results during the auction
- Developed core Excel tools to download and process round results, and prepare and check bids for each round
- Provided set up and management of full-scale auction software for running mock auctions
- Provided a management system to conduct full-scale practice auctions

- Developed auction simulation software
- Provided onsite auction support with a team of 2 – 4 members on site during the entire auction

3.0 PROJECT TEAM

Computech commits a highly talented staff to support APEK, one characterised by stability, client trust, and high-quality results. Collectively, this team has over 115 years of spectrum auction experience that directly relates to APEK's requirements. We present the proposed team – both key and support staff – in Figure 3.

Name	Role	Type	Responsibilities	Years of Auction Experience
[redacted]	Project Manager	Key	• Coordinate all project activities • Serve as primary point of contact for APEK • Act a liaison between APEK staff and Computech • Oversee implementation of auction design in support of APEK auction	19
[redacted]	Auction Design Specialist	Key	• Participate in the development of optimisation models and specialised algorithms supporting the auction • Work with software developers to ensure that the software implements the auction design correctly • Verify that solvers and algorithms are working as intended by participate in software testing	5
[redacted]	Senior Advisor	Key	• Analyse, compare, and recommend auction formats • Write auction rules • Provide support for Draft Tender Document • Create a post-auction report	17
[redacted]	Senior Advisor	Key	• Provide support for Draft Tender Document • Participate in auction workshops	14
[redacted]	Technical Architect	Key	• Design and implement code and database changes needed to CAP to meet APEK's requirements • Conduct unit and integration testing • Provide overall technical support • Provide onsite and remote support for mock and live auctions	13
[redacted]	Advisor	Support	• Provide advisory services as needed	12
[redacted]	Advisor	Support	• Provide advisory services as needed	15
[redacted]	Business Analyst	Support	• Obtain requirements for customised auction design features • Develop training materials • Conduct system testing • Provide remote support for user acceptance and internal user training	13
[redacted]	Operations	Support	• Conduct auction training	5

[redacted]	Analyst		• Assist in conducting mock auctions • Maintain user manuals	
[redacted]	Infrastructure/ Hosting Engineer	Support	• Setup CAP on hosting provider • Maintain security compliance • Provide security audit report • Monitor performance thresholds for CAP • Manage and maintain CAP revision control tools, and inventory of patches and versions	3

Figure 3 – Computech Team Roles and Responsibilities

Profiles for each team member follow below with full CVs included in Appendix I that provide evidence of the Computech team's technical and professional ability, and knowledge to perform the activities and consultancy services that APEK is seeking.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

APPENDIX A – FORM 1: OFFER

TENDERER
Computech, Inc.
7735 Old Georgetown Road
12th Floor
Bethesda, MD 20814
USA

OFFER

1. Subject of the Public Contract: **SELECTION OF TENDERER TO DELIVER PROFESSIONAL CONSULTING SERVICES AND ACCESS TO THE SOFTWARE FOR THE IMPLEMENTATION OF COMPLEX MULTIOBJECT MULTIROUND ELECTRONIC AUCTION FOR AWARDING RADIO FREQUENCIES IN THE 800 MHz, 900 MHz, 1800 MHz, 2100MHz AND 2600 MHz FREQUENCY BANDS**
2.1 Offer price in EUR without VAT: 380,000 EUROS
2.2 Offer price in EUR including VAT: 380,000 EUROS
3. Offer validity until 11/2/2013
4. Tenderer's Data
4.1 Company name: Computech, Inc.
4.2 Legal representative: [redacted]
4.3 VAT ID:
4.4 Registration Number:
4.5 International bank account Number: Bank of New York, Swift Code IRVTUS3N, for
Further Credit to Computech, Inc., Operating Account Number 1010190559
4.6 Address: 7735 Old Georgetown Road, 12th Floor, Bethesda, MD 20814 USA
4.7 Telephone Number: [redacted]
4.8 Fax Number: [redacted]
4.9 Contact person: [redacted], [redacted]

4.10 E-mail: [redacted]
4.11 Person responsible for signing the Contract: [redacted]

Date: 25.04.2013

[redacted]

APPENDIX B – FORM 2: PRO FORMA INVOICE

TENDERER
Computech. Inc.
7735 Old Georgetown Road
12th Floor
Bethesda, MD 20814
USA
PRO FORMA INVOICE

SUBJECT OF THE PUBLIC CONTRACT: SELECTION OF TENDERER TO DELIVER PROFESSIONAL CONSULTING SERVICES AND ACCESS TO THE SOFTWARE FOR THE IMPLEMENTATION OF COMPLEX ELECTRONIC MULTIOBJECT MULTIROUND AUCTION FOR AWARDING RADIO FREQUENCIES IN THE 800 MHZ, 900 MHZ, 1800 MHZ, 2100MHZ AND 2600 MHZ FREQUENCY BANDS

No.	Description of *supply/service*	*Unit*	*Quantity*	*Price per Unit without VAT:*	*VAT (%)*	*Price without VAT*
1.	Pre-Auction Consultancy Services (Chapter 2.2.1), Auction rules (Chapter 2.2.2) and Auction Software (Chapter 2.2.3), assuming	Pre-Auction Consultancy Services, Auction Software and License	1	130,000		130,000
	a) 2 auction workshops (see Section 10 of Chapter 2.2.1 of the Technical Description)	Workshop	1	27,000		27,000
	b) 2 mock auctions for Contracting Authority's staff and 2 mock auctions for each prospective bidder separately (see Section 11 of Chapter 2.2.1 of the Technical Description)	Mock auction	1	28,500		28,500
	c) Price of software license for the complex multi-round auction format CCA (possible	Piece	1	Included		Included

	discount for SMRA).					
2.	Post Auction Consulting services (Final auction report, auction results analysis, documentation and archive of auction procedure).	Post Auction Consulting services	1	16,000		16,000
3.	Consulting services of Senior Consultant	Day	30	3,350		100,500
4.	Consulting services of Junior Consultant	Day	30	2,600		78,000
				Total Price without VAT:		380,000
				Total Amount of VAT:		Not Applicable[1]
				Total price in EUR including VAT:		380,000

Date: 25.04.2013

Stamp and Signature [redacted]

Assumptions:

[1]Since we are both United States based companies, Slovenia government will pay VAT directly, therefore it is not shown in worksheet.

Hosting costs assume auction runs less than three months.

Onsite auction support is covered in Junior and Senior consultant rate - discounts available for offsite support

Workshops and mock auctions are in-person with travel included in price shown

All Mock Auctions are conducted in the same trip, not to exceed 9 days on-site

APPENDIX C – FORM 3: CONTRACT SAMPLE

The following pages contain the completed and signed Form 3: Contract Sample.

FORM-3

DRAFT CONTRACT

Post and Electronic Communication Agency of the Republic of Slovenia, Stegne 7, 1000 Ljubljana, Registration No. 1332899, VAT ID SI10482369, represented by the director Franc Dolenc (hereinafter: "the Contracting authority")

and

……., Company Registration No. ....., VAT ID ....., represented by ……..... (hereinafter: "the Provider"),

hereby enter into

CONTRACT No.: _____

INTRODUCTORY PROVISIONS

Article 1

(1) The Contracting authority and the Provider establish that:

- the Contracting authority carried out the procedure to award a public Contract for "*Selection of tenderer to deliver professional consulting services and access to the software for the implementation of complex electronic multiobject multiround auction for awarding radio frequencies in the 800 MHz, 900 MHz, 1800 MHz, 2100 MHz and 2600 MHz frequency bands*" on the Public Procurement Portal under publication No. ..... on ..... and in the EU Official Journal under publication No. ..... on ..... pursuant to Article 25 of the Public Procurement Act (Official Gazette of the Republic of Slovenia No. 12/2013 – UPB5; hereinafter: ZJN-2);
- based on the public Procurement referred to in the first paragraph and the Offers received, the Contracting authority selected the Provider as the most favourable tenderer for the award of the Contract referred to in the first paragraph under Public Contract Award Notice No. ……. dated _____,
- the Provider has the necessary professional and technical competences for providing the Service as defined by this Contract.

(2) The subject of this Contract shall be financed based on the provisional twelfths of the Contracting Authority's approved Budget for year 2012 or based on the Budget of Contracting Authority for the relevant year that forms the basis for the implementation of activities. The funds have been allocated to account No. 4020.

Article 2

Under this Contact the Parties shall define the general and specific conditions of the provision of the Service.

SUBJECT OF THE CONTRACT

Article 3

(1) The subject of this Contract shall be the provision of professional consulting services and access to the software for the implementation of complex electronic multiobject multiround auction for awarding radio frequencies in the 800 MHz, 900 MHz, 1800 MHz, 2100 MHz and 2600 MHz frequency bands.

(2) The Offer and complete Tender documentation shall form an integral part of this Contract.

Article 4

(1) The Contracting authority may, under this Contract, order additional services to the Provider that were not included in the initial Contract award but have become necessary for the provision of the Service due to unforeseeable circumstances, or when such activities cannot be technically or economically separated from the main Service without causing difficulties to the Contracting authority, or in the event of services which the Contracting authority could award separately from the initial Contract award but has decided not to do so due to their critical role in the subsequent phases of the implementation of this Contract and the successful provision of the Service defined by this Contract.

(2) In cases stated above, the Contracting authority shall implement a negotiated procedure without prior publication of a Contract notice and add an Annex to this Contract or sign a new Contract with the Provider pursuant to Item 1 of the fifth paragraph of Article 29 of the ZJN-2.

OBLIGATIONS OF THE CONTRACTING AUTHORITY AND THE PROVIDER

Article 5

The Contracting authority undertakes to:

- make available to the Provider all necessary information, data and documents available to the Contracting authority and related to the provision of the Service under this Contract,
- cooperate with the Provider's authorised representative,
- submit its requests to the Provider in due time to enable the normal implementation of Contractual services,
- ensure the human, informational and financing resources required for the implementation of services,
- give the Provider all the support necessary for the provision of services according to the requirements of this Contract,
- inform the Provider of any and all changes and new conditions that could affect the provision of the Contractual services,
- review the Provider's report and the specifications of tasks completed according to the technical requirements of the Tender documentation after each completed phase,
- pay for services within the agreed deadlines.

Article 6

The Provider confirms that it has familiarised itself with the subject of this Contract as defined in the technical specifications that are an integral part of this Contract before submitting its Offer and signing this Contract and undertakes to:

- perform the services in compliance with all the applicable regulations of the Republic of Slovenia and the European Union governing the subject of this Contract and according to professional standards,
- perform the services under this Contract in a professional and perfectly manner, at a high level of quality and in accordance with good business practices,
- ensure the highest quality of services regardless of the time and location of their implementation,
- perform the services in the most economical manner within the Contracting Authority's specifications,
- use advanced information technologies and methods in the implementation of the services,
- provide all necessary algorithms for the conduct of auction and access to computer hardware and software, including intellectual property rights, as well as all related materials and equipment,
- provide a detailed security plan for the prevention of violations of auction rules and unfair competition,
- cooperate with the Contracting authority's staff and other advisors employed by the Contracting authority,
- Offer advice in setting up auctions according to the Contracting authority's technical requirements, which form an integral part of this Contract,
- conduct auction according to the Client's technical requirements, which form and integral part of this Contract,
- Offer assistance to the Contracting authority's following a completed auction,
- support the Contracting authority's in the event of any disputes relating to the subject of this Contract,
- provide assistance in support and related services connected to the subject of this Contract
- fulfil all foreseen obligations in due time and in the required manner,
- notify the Contracting authority in written form of any circumstances that could make the correct and high-quality provision of the services difficult or impossible,
- notify the Contracting authority in written form of any new circumstances that could affect the substance or time aspects of the provision of the services,
- enable the Contracting authority to conduct appropriate supervision,
- draw up a report with specifications of completed tasks according to the technical requirements of the Tender documentation after each completed phase,
- observe and implement the Contracting authority 's requests as defined in the Tender documentation pursuant to Article 1 of this Contract, comply with its Offer dated _____, on the basis of which the Provider was selected, and act in accordance with the provisions of this Contact for its entire duration,
- issue invoices for the services performed in accordance with the prices stated in its Offer following the completion of such services and upon the Contracting authority 's approval of its report.

Article 7

(1) If the Contracting authority orders a service that in the Provider's opinion would be in contravention of regulations or cause disproportionate damage to the Contracting authority or

a third party, the Provider may decline to perform such a service, without infringing the terms of this Contract, if the Provider submits valid argumentation for such a refusal and prove the existence and present facts in support of its refusal. If the request does not allow for the professionally optimal provision of services or requires solutions contrary to professional rules, the Provider shall notify the Contracting authority of this fact and propose a more suitable solution; however, if the Contracting authority insists on its request, the Provider shall be obligated to fulfil its task according to the Contracting authority's request.

(2) The Provider's unsubstantiated refusal to perform a requested task or a deviation from the requested method of implementation shall be deemed a breach of obligations assumed under this Contract, due to which the Contracting authority may terminate this Contract, provided that the Contracting authority has previously notified the Provider of the infringements in writing.

Article 8

The Contracting authority's requests and specifications shall be subject to change, amendment and supplementation by mutual arrangement during the term of the Contract, in which case the Provider shall not in any way be entitled to a reimbursement of any costs that modified requests may cause.

COMPETENT AUTHORITIES

Article 9

(1) The administrator of the Contract for the Contracting Authority shall be Janja Slatnar.

(2) The administrator of the Contract for the Provider [redacted], who shall also be responsible for the provision of services under this Contract.

CONTRACT VALUE

Article 10

(1) The Provider shall charge the following prices for the services defined in Article 1 of this Contract:

1. Sum total of all counselling services prior to the implementation of the auction, the preparation of detailed auction rules and the provision of software for the conduct of the auction: EUR _____
2. Sum total of all counselling services following the auction (auction analysis, final auction report, documentation and archiving of the auction procedure): EUR_____
3. Price of a counselling day of a Senior Advisor: EUR _____
4. Price of a counselling day of a Junior Advisor: EUR _____

based on the Provider's Offer no. _____.

(2) The Parties agree that this price shall include all of the Provider's costs. The price referred to in the previous paragraph shall include all duties, taxes and costs. The stated prices are DDP (Incoterms 2010).

(3) The price shall be fixed for the entire duration of this Contract.

TERMS OF PAYMENT

Article 11

The Provider shall issue invoices for services performed under this Contract to the Contracting Authority following the completion of each phase based on a report approved by the Contracting Authority and in accordance with the Offer prices as follows:

- Phase One: the Provider shall issue an invoice following the publication of the decision to implement the public call for tenders for awarding the relevant radio frequencies in the Official Gazette of the Republic of Slovenia, presumably on 2 September 2013.
- Phase Two: the Provider shall issue an invoice on the first day of the auction, presumably on 31 January 2014. In the event that the auction lasts longer than three months, the Provider shall issue an invoice at the completion of each 3-months period;
- Phase Three: the Provider shall issue an invoice upon the issuing of the decisions on awarding the relevant radio frequencies, presumably on 1 June 2014, at the latest.
- Phase Four: the Provider shall issue an invoice for services performed during the period from the issuing of the decision on awarding the relevant radio frequencies until 31 December 2014.

Article 12

(1) The Contracting Authority shall pay each issued invoice previously confirmed by the Contracting Authority 's Contract Administrator within 30 days of the official date of receipt of the invoice into the following bank account of the Provider: IBAN _____ held at (name and BIC of the bank) _____.

(2) If the deadline for payment is non-working day, it is considered that the deadline for payment is the first subsequent working day.

Article 13

In the event the Contracting Authority fails to pay the invoice in due time, the Provider shall be entitled to charge penalty interest for late payment from the due date to the date of payment of the invoice.

PROVIDER'S GUARANTEES AND WARRANTY OBLIGATIONS

Article 14

(1) The Provider guarantees to provide high quality services in accordance with applicable regulations and standards and the requests specified by the Contracting authority.

(2) In the event the Provider fails to provide a specific service under this Contract, the Contracting authority may order such services from other providers at the Provider's expense.

FORCE MAJEURE

Article 15

(1) Force majeure shall mean any unforeseen and unexpected event arising independently from the Parties' intentions that could not have been foreseen on the day of the conclusion of this Contract and which in any way affects the fulfilment of Contract obligations.

(2) The Provider undertakes to inform the Contracting authority of any case of force majeure within three days of such an event.

(3) Neither of the Parties shall be held responsible for failure to fulfil any of their obligations due to reasons beyond their control.

BUSINESS SECRET

Article 16

(1) The Parties agree that all data received through the implementation of this Contract shall constitute a business secret and undertake to duly protect such data and use it exclusively for the implementation of this Contract.

(2) The Contracting authority also undertakes to protect all of the Provider's business information received under this Contract.

(3) The Provider undertakes not to publish or use in any manner the Contracting authority's business secrets or confidential information to which the Provider was allowed access during or after the term of this Contract if such materials are designated as confidential or for internal use only, without obtaining prior explicit written approval from the Contracting authority.

(4) The Contracting authority shall be entitled to hold the Provider responsible for the full sum of all damages incurred by the publication or use of the Contracting authority's business secrets or confidential information.

CONTRACTUAL PENALTY

Article 17

(1) In the event that the provider fails to meet the time limit for the implementation of services for reasons that are not caused by the Contracting authority and which cannot be reasonably justified, the Provider shall be obligated to pay 0.5% of the Contractual sum total for each day of the delay, up to a maximum of 10% of the sum total stated in Items 1 and 2 of the first paragraph of Article 10 of this Contract.

(2) If a delay or error during the implementation hinders the purpose of this Contractual relationship, the Contracting authority shall be entitled to terminate this Contract and request damages.

ANTI-CORRUPTION CLAUSE

Article 18

If it is determined that during the course of the public tender on the basis of which this Contract was signed or during the implementation of this Contract anyone acting in the name or for the benefit of the one of the Parties Offered, promised or awarded any undue advantage to a representative, authorised person or agent of the Contracting authority or another public sector body or organisation in order to be awarded the Contract, receive special conditions or omit due supervision over the Contractual obligations, or any other action or omission incurring damage to any public sector body or organisation, or allowing undue benefits to any representative or agent of a public sector body or organisation, the other Party or its representative, authorised person or agent, this Contract shall be deemed null and void.

DISPUTE RESOLUTION

Article 19

(1) In case of any dispute relating this Contract, the Contracting Parties shall seek a consensual solution.

(2) If such solution is not found, the dispute shall be resolved by the competent court in Ljubljana.

FINAL PROVISIONS

Article 20

(1) This Contract shall enter into force on the date it is signed by the last of the two Parties.
(2) The Contract may be changed or amended with a written annex agreed upon and signed by both Parties. If any of the provisions of this Contract is held to be invalid or later becomes so, the remaining provisions of this Contract shall not in any way be affected. An invalid provision shall be replaced with a valid provision that fulfils the intent of the provision rendered invalid as closely as possible.

Article 21

(1) Either of the Parties may withdraw from this Contract due to a breach of Contractual obligations by the other Party if the breach continues after a written notice. In the event of withdrawal, the parties shall settle all mutual obligations under this Contract and any damages incurred.

(2) Either Party may withdraw from the Contract provided that the Party chooses an appropriate time to withdraw in consideration of the other Party and in view of the reasons for the withdrawal, and settles all costs incurred by such withdrawal.

Article 22

Mutual rights and obligations not explicitly defined by this Contract shall be governed by the provisions of the law regulating obligational relationships and other applicable provisions regulating mutual obligations under this Contract.

Article 23

(1) This Contract shall be entered into force for the period starting from the date it is signed until the date of the issuing of decisions on awarding the relevant radio frequencies, or 31 December 2014, at the latest.

(2) This Contract has been drawn up in four (4) identical copies, of which two (2) copies shall be handed to the Client and two (2) to the Provider.

PROVIDER:

Date:

_____

[redacted]

CLIENT

Date:

APEK

Franc Dolenc
Director

Annexes:
- Offer, dated ....., including a preliminary cost estimate,
- Tender documentation No. ..... dated .....

APEK

Article 23

(1) This Contract shall be entered into force for the period starting from the date it is signed until the date of the issuing of decisions on awarding the relevant radio frequencies, or 31 December 2014, at the latest.

(2) This Contract has been drawn up in four (4) identical copies, of which two (2) copies shall be handed to the Client and two (2) to the Provider.

PROVIDER:

Date: April 25, 2013

Computech, Inc.

[redacted]

CLIENT

Date:

APEK

Franc Dolenc
Director

Annexes: April 25, 2013

- Offer, dated ....., including a preliminary cost estimate,
- Tender documentation No. ..... dated .....

APPENDIX D – FORM 4: DECLARATION OF SUITABILITY

The following pages contain the completed and signed Form 4: Declaration of Suitability and a statement of good standing from the state of Maryland in the U.S.

APPENDIX D
FORM 4

TENDERER
Computech. Inc.
7735 Old Georgetown Road
12th Floor
Bethesda, MD 20814
USA

DECLARATION

This Declaration is an evidence of compliance with those conditions set out in point 12 of the Chapter II of this Instructions, for which the Contracting Authority has indicated that submission of this Declaration is sufficient.

Tenderer shall circle as appropriate if he meets the condition or not.

No.	Under criminal and material responsibility we declare that:	Circle as appropriate	
1.	The Tenderer or its legal representatives in the case of legal persons have never been the subject of a conviction by final judgement of crimes listed in the first paragraph of Article 42 of the ZJN-2: acceptance of bribe during the election; fraud; abuse of a position of monopoly; false bankruptcy; defrauding creditors; commercial fraud; fraud affecting the European Union; deception in obtaining loan or advantages; fraud in securities trading; deception of purchasers; unauthorised use of another's mark or model; unauthorised use of another's patent or topography; forgery or destruction of business documents; disclosure and unauthorised acquisition of trade secrets; abuse of information system; abuse of insider information; abuse of financial instruments market; abuse of position or trust in business activity; prohibited acceptance of gifts; prohibited giving of gifts; counterfeiting money; fabrication and use of counterfeit stamps of value or securities; money laundering; abuse of non-cash means of payment; use of counterfeit non-cash means of payment; fabrication, acquisition and disposal of instruments of forgery; tax evasion; smuggling; disclosure of classified information; acceptance of bribes; giving bribes; accepting benefits for illegal intermediation; giving of gifts for illegal intervention; criminal association.	YES	NO
2.	The Tenderer is not on the day of submission of Offer disqualified from being awarded public Contracts due to the inclusion in the record of Tenderers with negative references in accordance with Article 77.a of ZJN-2.	YES	NO
3.	The Tenderer has on the date of submission of the Offer, in accordance with the regulations of the country in which he is established or regulations of the Contracting Authority no outstanding, unpaid obligations relating to the payment of social security contributions or in connection with the payment of taxes in the amount of 50 Euros or more.	YES	NO

4.	The Tenderer has no any outstanding liabilities to Subcontractors in previous public Procurement procedures.	YES	NO
5.	The Tenderer has a valid registration to do business, which is the subject of this procedure (consulting services in the field of mobile industries and /or regulatory affairs) pursuant to the regulations of the Member State of his establishment.	YES	NO
6.	The Tenderer accepts all the conditions of this Tender Documentation.	YES	NO
7.	The information given in this Offer is accurate and not misleading.	YES	NO

Under criminal and material responsibility we declare that all the above information is true and accurate.

This Declaration is an integral part of the Offer, which we are applying for a Public Contract "SELECTION OF TENDERER TO DELIVER PROFESSIONAL CONSULTING SERVICES AND ACCESS TO THE SOFTWARE FOR THE IMPLEMENTATION OF COMPLEX MULTIOBJECT MULTIROUND ELECTRONIC AUCTION FOR AWARDING RADIO FREQUENCIES IN THE 800 MHz, 900 MHz, 1800 MHz, 2100MHz AND 2600 MHz FREQUENCY BANDS".

Date: 4/25/13

[redacted]

I, a notary Public in and for the jurisdiction of Montgomery County, Maryland, hereby certify that [redacted] to me identified as [redacted] personally appeared before me in said jurisdiction and acknowledged to me that he executed the said Declaration of Suitability as his free act and deed, for the purposes therein contained.

Given under my hand and seal this 25th day of April, 2013.

[redacted]

Notary Public

[redacted]
Notary Public
State of Maryland
Montgomery County
My commission exp. April 27, 2017

My Commission Expires: 4/27/17

I, [redacted] an [redacted], hereby certify that [redacted]. and as such is authorized to certify on behalf of Computech, Inc. He did personally appear before me on this 25th day of April, 2013 and sign the Declaration of Suitability (Appendix D – Form 4).

Date: 4/25/2013

[redacted]

I, a notary Public in and for the jurisdiction of Montgomery County, Maryland, hereby certify that [redacted], to me identified as [redacted] personally appeared before me in said jurisdiction and acknowledged to me that she executed the said Declaration of Suitability as her free act and deed, for the purposes therein contained.

Given under my hand and seal this 25th day of April, 2013.

[redacted]

Notary Public

My Commission Expires: 4/27/17

[redacted]
Notary Public
State of Maryland
Montgomery County
My commission exp. April 27, 2017

[Notarial Seal]

STATE OF MARYLAND
Department of Assessments and Taxation

[redacted]

[redacted]

Charter Division

301 West Preston Street, Baltimore, Maryland 21201
Telephone Balto. Metro (410) 767-1340 / Outside Balto. Metro (888) 246-5941
MRS (Maryland Relay Service) (800) 735-2258 TT/Voice
Fax (410) 333-7097

crblnk

R8205890

APPENDIX E – LIST OF SUBCONTRACTORS

Computech proposes to use one subcontractor, Auction Technologies Inc. We provide the requested subcontractor information below.

1. Company Name
Auction Technologies Inc.

2. Full Address
1 Belmont Road TH6
West Harwich, MA 02671

3. Registration Number
Taxpayer ID/FEIN 20-5973008

4. VAT Number
Not Applicable

5. Bank Account
Wells Fargo 7167951909
Wire Routing Number: 121000248 (Domestic)
Swift Code: WFBIUS6S (International)

6. Planned Work to Perform

Item	Quantity	Value (without VAT)*	Location
Pre-Auction Consultancy Services	1	15,600	Off-site
2 auction workshops	1	27,000	On-site
Post Auction Consulting services	1	16,000	Off-site
Consulting services of Senior Consultant	30	100,500	On-site

* Subject to change

APPENDIX F – AUTHORISATION FOR PAYMENT FOR WORK UNDERTAKEN DIRECTLY TO THE SUBCONTRACTOR

Computech, Inc. proposes to use one subcontractor, Auction Technologies, Inc. to carry out part of the public Procurement. In accordance with the seventh paragraph of Article 71 of the ZJN-2 Computech, Inc. authorizes direct payments by the Contracting Authority to Auction Technologies, Inc. for subcontractor invoices approved and submitted by Computech, Inc. for payment.

[redacted]

Date: 25.04.2013

APPENDIX G – CONSENT FOR DIRECT PAYMENTS

Auction Technologies Inc., who will be working as a subcontractor to Computech, Inc. gives their consent to receive direct payments from the Contracting Authority for work performed under the Public procurement. Information for direct payments to Auction Technologies Inc. is below.

1. Company Name Auction Technologies Inc.
2. Full Address 1 Belmont Road TH6 West Harwich, MA 02671
3. Registration Number Taxpayer ID/FEIN 20-5973008
4. VAT Number
5. Bank Account Wells Fargo 7167951909 Wire Routing Number: 121000248 (Domestic) Swift Code: WFBIUS6S (International)

Date:___April 24, 2013

APPENDIX H – CERTIFICATES

On the following pages, we provide five Reference Certificates for regulatory authorities acting as auctioneers and two Reference Certificates for bidders (**Please note**: Auction Technologies worked with KPN on three separate projects, in three separate countries. In this response, we provide one reference certificate, which covers all three of these projects). All are signed by the organisation ordering the services.

Project Name	Reference Type
Auction Support Services for the Federal Communications Commission (FCC)	Regulatory authority
Auction Consulting Services (800 MHz band) for the Swedish Post and Telecom (PTS)	Regulatory authority
Spectrum Auction Software and Consultation Services for the Comisión Federal de Telecomunicaciones (COFETEL)	Regulatory authority
Spectrum Auction Software and Consultation Services for the Finnish Communications Regulatory Authority (FICORA)	Regulatory authority
Auction Spectrum Software and Services for the Telecommunications Regulatory Authority (TRA) of the Kingdom of Bahrain	Regulatory authority
Austria 4G auction (T-Mobile)	Bidder
Germany multi-band auction (KPN)	Bidder
Netherlands multi-band auction (KPN)	Bidder
Belgian 4G auction (KPN)	Bidder

REFERENCE CERTIFICATE

1. Project Title	
Auction Support Services for the Federal Communications Commission (FCC)	
2. Brief Description Computech has been responsible for designing and operating over 80 auctions (including four 800 MHz auctions) at the Federal Communications Commission (FCC) in the U.S. since 1994 that have resulted in more than $87B (USD) in gross winning bids. Computech has provided full auction life cycle support including pre-auction, during auction, and post-auction support for mock and live auctions. They have designed, developed, implemented, and operated multiple generations of auction software for various auction designs including SMRA, package bidding, hierarchical package bidding, and reverse auctions. They also advise on spectrum auction policies and methods and research new auction designs and theory.	
3. Project Budget Various budgets for over 80 auctions since 1994	**4. Project Duration (start and end dates)** March 1994 – Present
5. Contact Person Name [redacted]	**6. Contact Email/Phone Number** [redacted]

I hereby certify that the information in this certificate is accurate.

[redacted]

4/19/13

Date

REFERENCE CERTIFICATE

1. Project Title	
Auction Consulting Services (800 MHz band) for the Swedish Post and Telecom (PTS)	
2. Brief Description Computech provided auction consulting services and hosted software to the Swedish Post and Telecom (PTS) in support of Sweden's 800 MHz band auction using a customised version of the Computech Auction Platform (CAP). Computech provided input to policy and design decisions, provided a working prototype of CAP for Sweden's auction rules, conducted training, conducted a mock auction, and provided support during the live auction.	
3. Project Budget 886,567 (Swedish Krona)	**4. Project Duration (start and end dates)** November 2010 – March 2011
5. Contact Person Name [redacted]	**6. Contact Email/Phone Number** [redacted]

I hereby certify that the information in this certificate is accurate.

[redacted]

Signature

20130422

Date

REFERENCE CERTIFICATE

1. Project Title Spectrum Auction Software and Consultation Services for the Comisión Federal de Telecomunicaciones (COFETEL)
2. Brief Description Computech provided full auction life cycle support, from initial auction policy, design, and format consultation, through system customisation, and live auction conduct and support to the Comisión Federal de Telecomunicaciones (COFETEL) for its 1.7 GHz and 1.9 GHz auctions. Computech installed its Computech Auction Platform (CAP) at the COFETEL site. They provided recommendations on critical auction details including policy and design decisions such as selection of appropriate auction format, rules and parameters for legal notices and official auction rules, reserve prices, minimum opening bid amounts, assigned point values for the licenses to be auctioned, and required activity and stage transition percentages for each stage of the auction. Computech conducted onsite hands-on training in Mexico City and provided support during the live auctions.

3. Project Budget $1,850,640 (USD)	**4. Project Duration (start and end dates)** May 2009 – July 2010
5. Contact Person Name [redacted]	**6. Contact Email/Phone Number** [redacted]

I hereby certify that the information in this certificate is accurate.

[redacted]

19-April-2013

Date

REFERENCE CERTIFICATE

1. Project Title Spectrum Auction Software and Consultation Services for the Finnish Communications Regulatory Authority (FICORA)	
2. Brief Description Computech is providing consultation support and auction software for Finland's current auction of the 791-821 and 832-862 MHz spectrum bands. Computech conducted workshops to discuss auction rules and policies, customized and configured CAP in accordance with FICORA's auction rules, assisted FICORA with user acceptance testing, provided training, and conducted external test auctions (mock auctions). Computech provided onsite live support at the beginning of the auction and today is providing remote support for the ongoing auction.	
3. Project Budget 158,780 (EUR)	**4. Project Duration (start and end dates)** June 2012 – Present
5. Contact Person Name [redacted]	**6. Contact Email/Phone Number** [redacted]

I hereby certify that the information in this certificate is accurate.

[redacted]

Director

22.4.2013

Date

هيئة تنظيم الاتصالات
Telecommunications Regulatory Authority
Kingdom of Bahrain - مملكة البحرين

Date: 23 April 2013
Ref: TOD/0413/042

REFERENCE CERTIFICATE - 1

1. Project Title Auction Spectrum Software and Services for the Telecommunications Regulatory Authority (TRA) of the Kingdom of Bahrain	
2. Brief Description As a subcontractor to Frontier Economics, Computech is providing an auction software platform, hosting services, and consulting services to support the Telecommunications Regulatory Authority (TRA) of the Kingdom of Bahrain in conducting its auction for 800, 1800, 2100, and 2600 MHz spectrum. Computech has customized its Computech Auction Platform (CAP) for TRA's auction rules and conducted training of CAP for TRA staff. They are in the process of providing support and services in conducting the upcoming mock and live auctions.	
3. Project Budget $214,948 (USD)	**4. Project Duration (start and end dates)** January 2013 – Present
5. Contact Person Name [redacted] Director of Technical and Operations	**6. Contact Email/Phone Number** [redacted]

[redacted] this certificate is accurate.

23/4/2013
Date

P.O. Box 10353, Kingdom of Bahrain
Tel: +973 17 520 000, Fax: +973 17 532 125
Consumer Call Center: 81188, Fax: +973 17 532523

ص.ب: ١٠٣٥٣، مملكة البحرين.
هاتف: ٠٠٠ ٥٢٠ ١٧ ٩٧٣+ ، فاكس: ١٢٥ ٥٣٢ ١٧ ٩٧٣+
مركز اتصال المستهلكين: ٨١١٨٨، فاكس: ٥٣٢٥٢٣ ١٧ (٩٧٣+)

REFERENCE CERTIFICATE

1. Project Title 4G auction strategy	
2. Brief Description Advise on bid strategy, war room support, bidding tools and bidding simulations	
3. Project Budget €500,000	4. Project Duration (start and end dates) March 2013 – October 2013
5. Contact Person Name [redacted]	6. Contact Email/Phone Number [redacted]

I hereby certify that the information in this certificate is accurate.

[redacted]

Signature

23.4.2013

Date

REFERENCE CERTIFICATE

1. Project Title(s0 - German multi-band auction - Netherlands multi-band auction - Belgian 4G auction	
2. Brief Description ALL – Bid strategy, War room support and bidding tools including simulations	
3. Project Budget – Belgium – EUR 100,000 Germany – EUR – 2M Netherlands – EUR 4M	4. Project Duration (start and end dates) Belgium – March 2011, Nov 2011 Germany – Oct 2009 – May 2010 Netherlands – Feb. 2011 – Nov, 2012
5. Contact Person Name [redacted]	6. Contact Email/Phone Number [redacted]

I hereby certify that the information in this certificate is accurate.

Signature

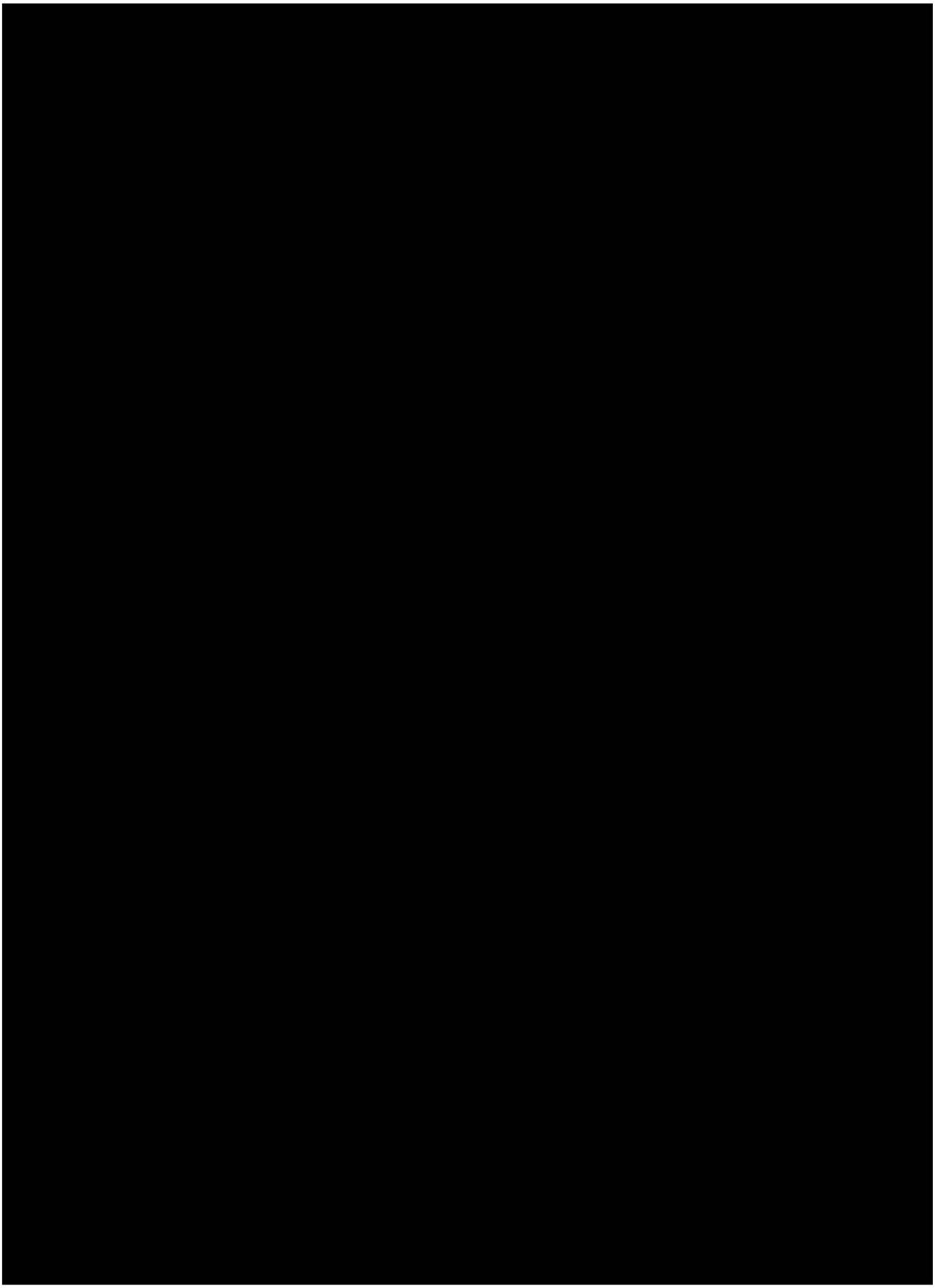
[redacted]

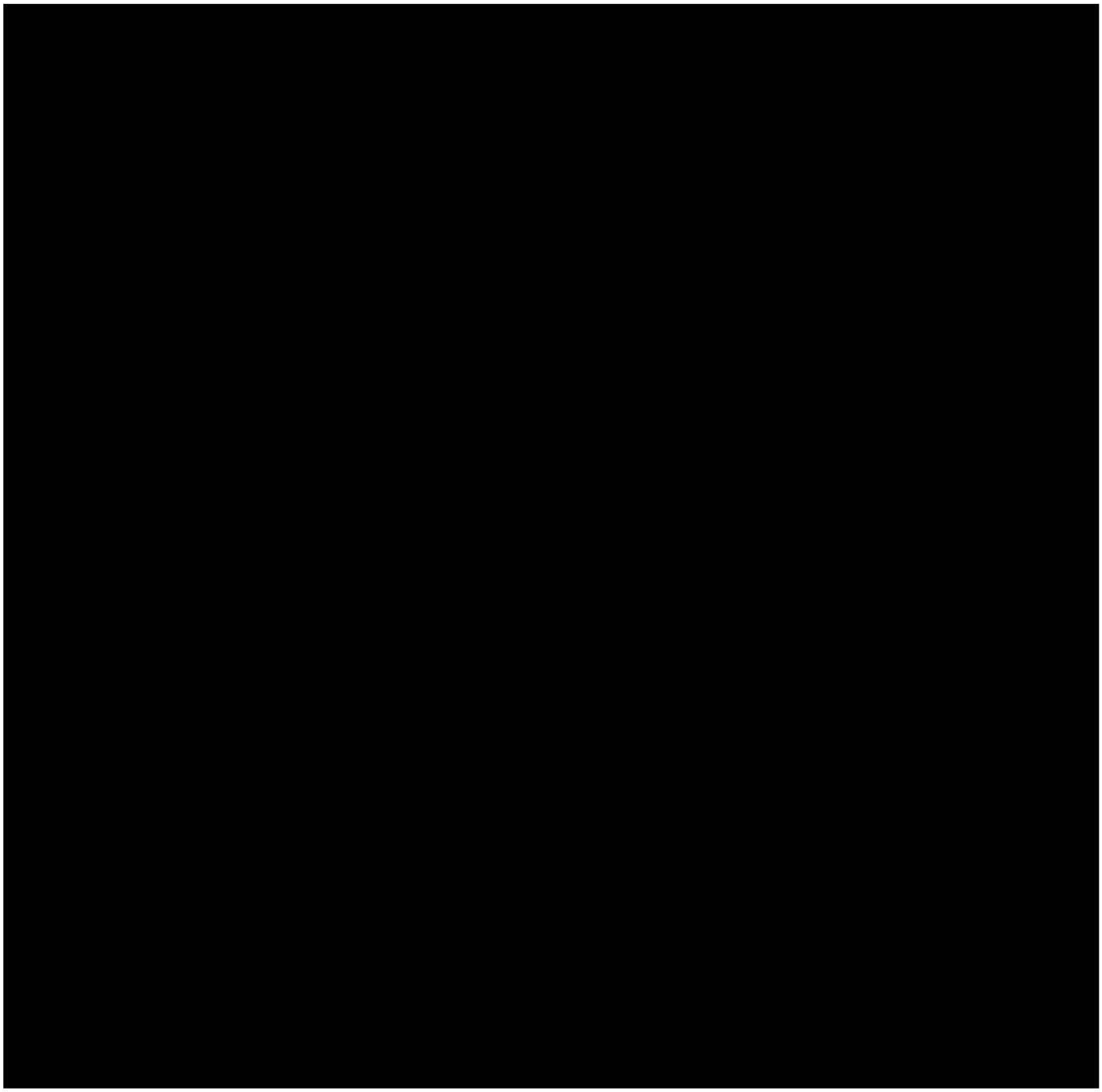
Date 24.4.2013

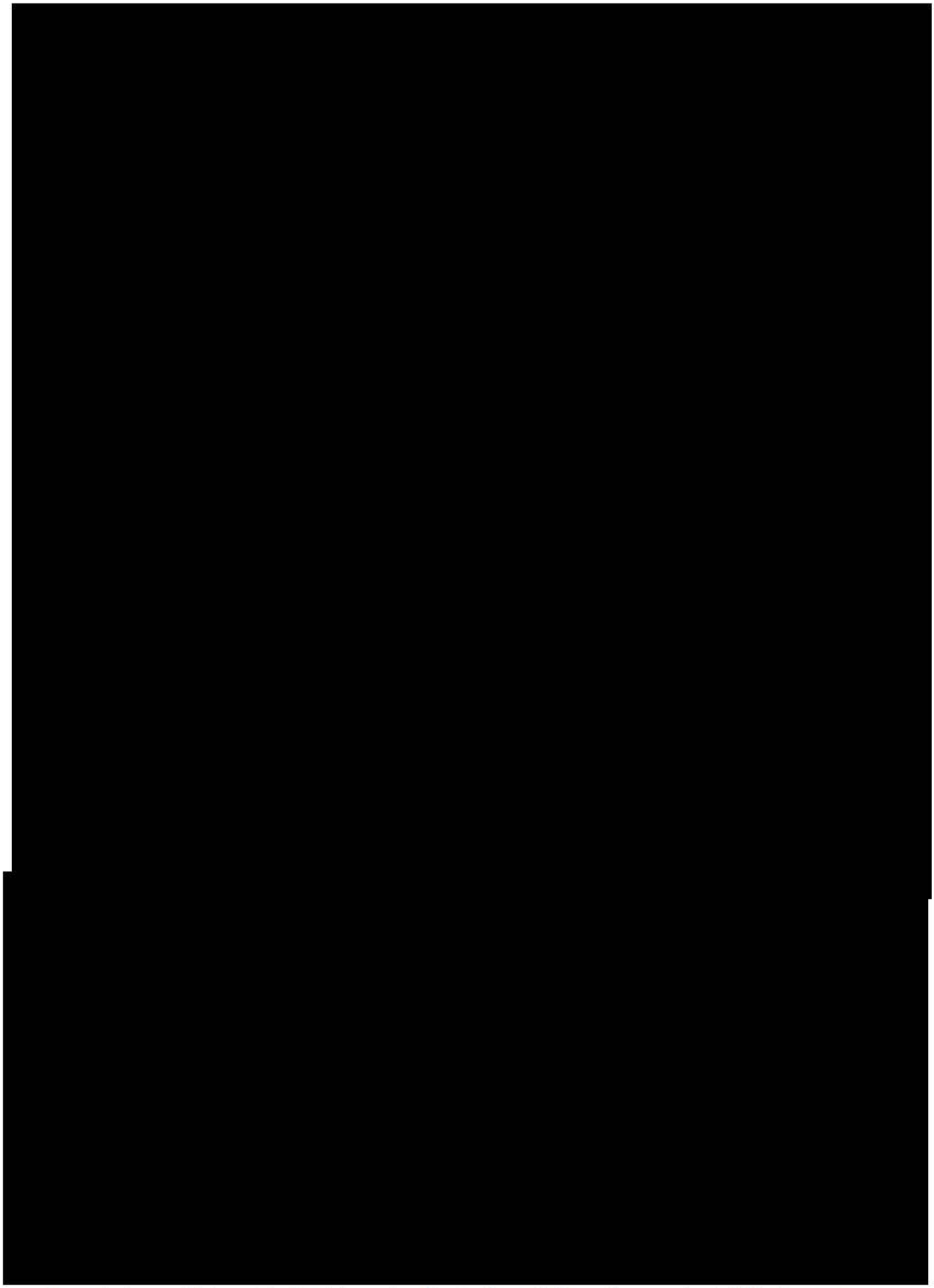
APPENDIX I – CURRICULA VITAE

In this appendix, Computech provides CVs for key personnel with knowledge and experience in similar projects as well as additional CVs of supporting personnel.

[redacted]







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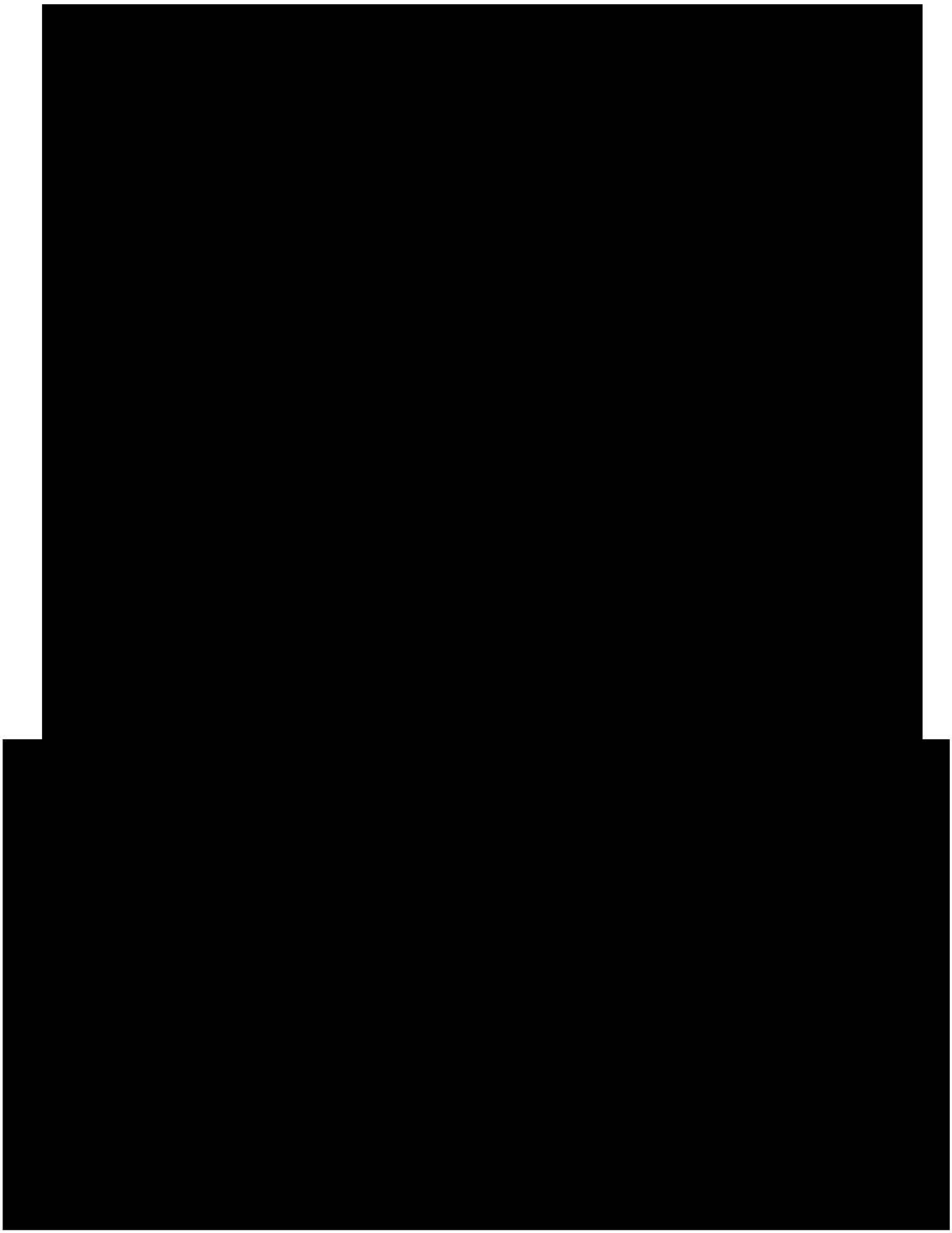

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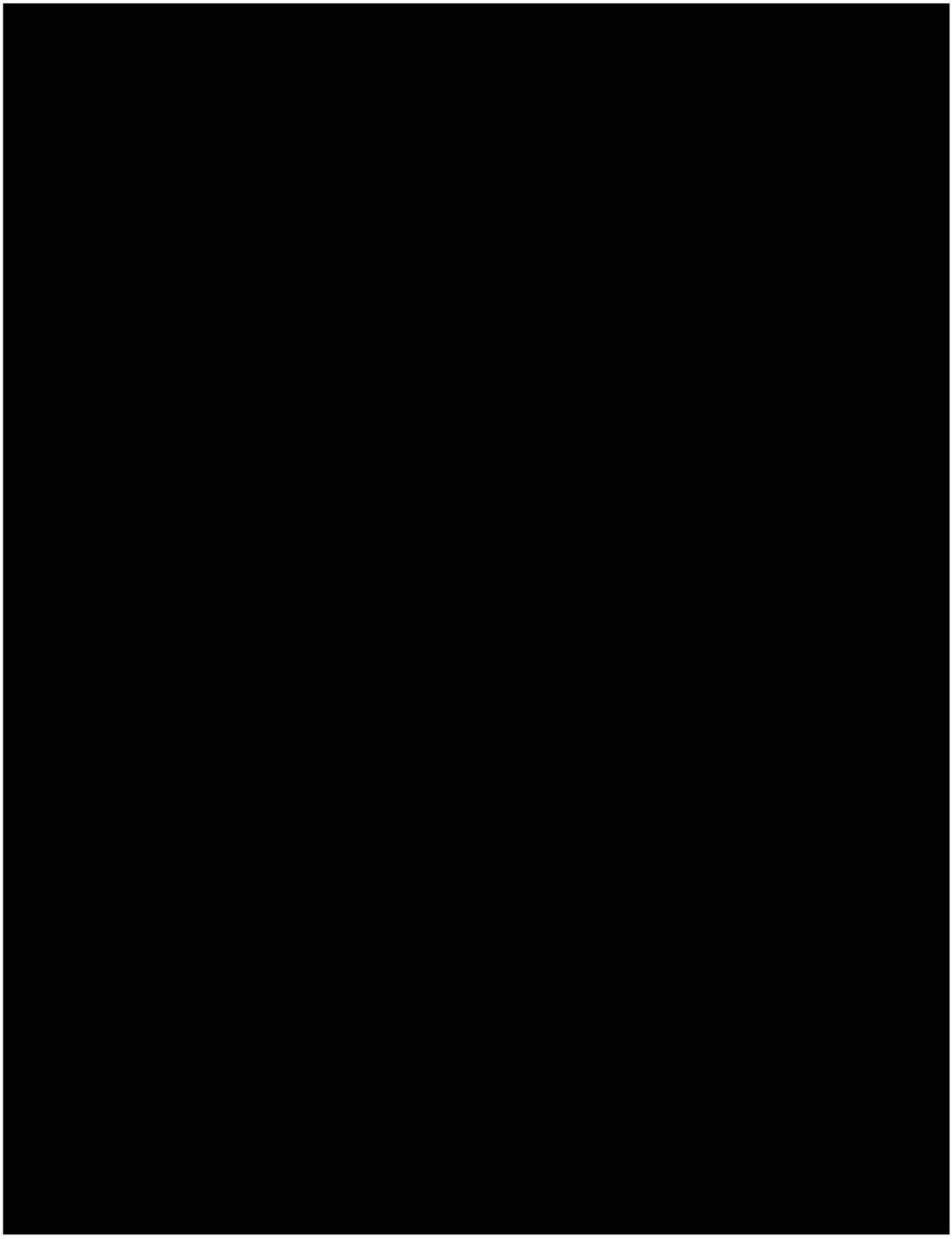

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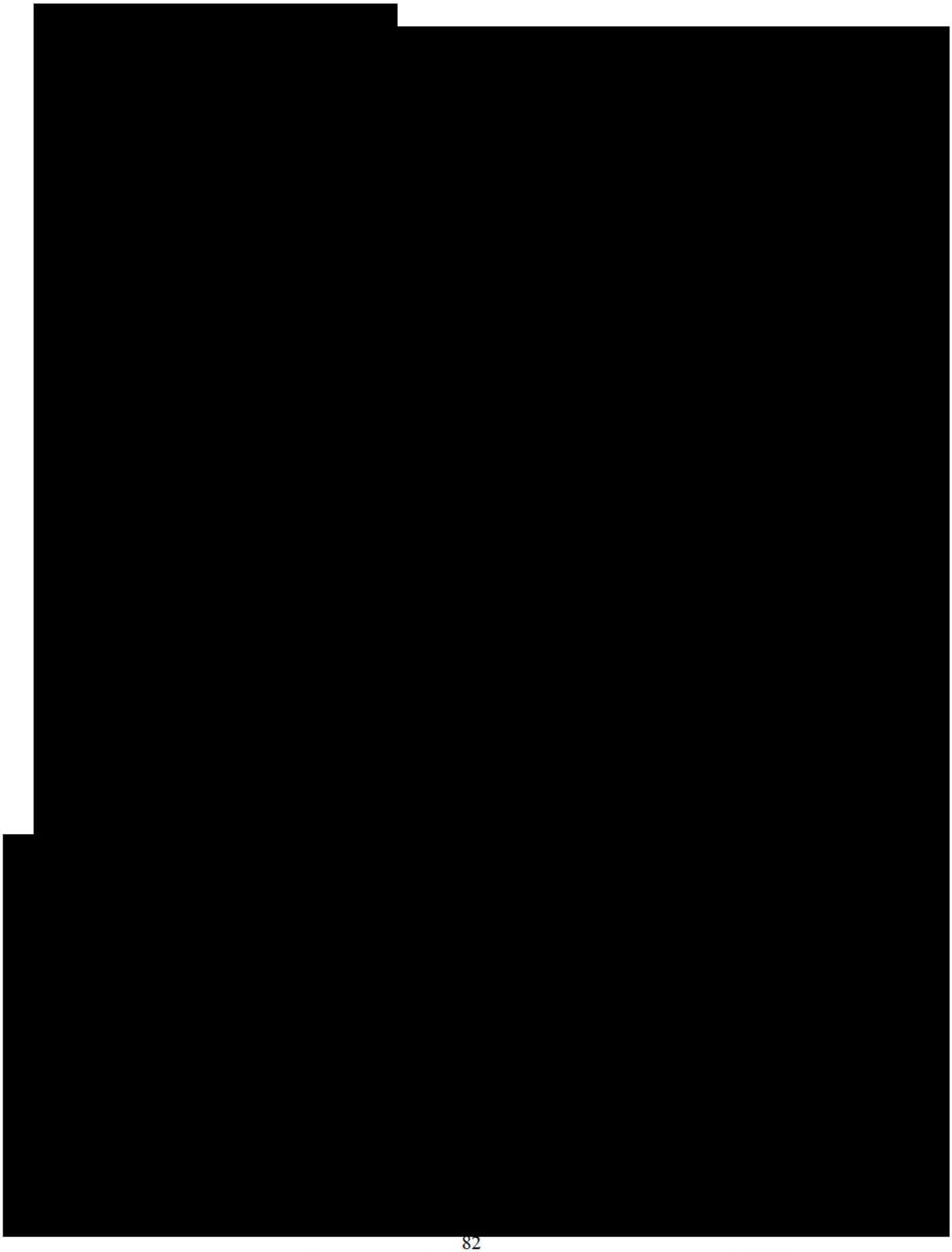

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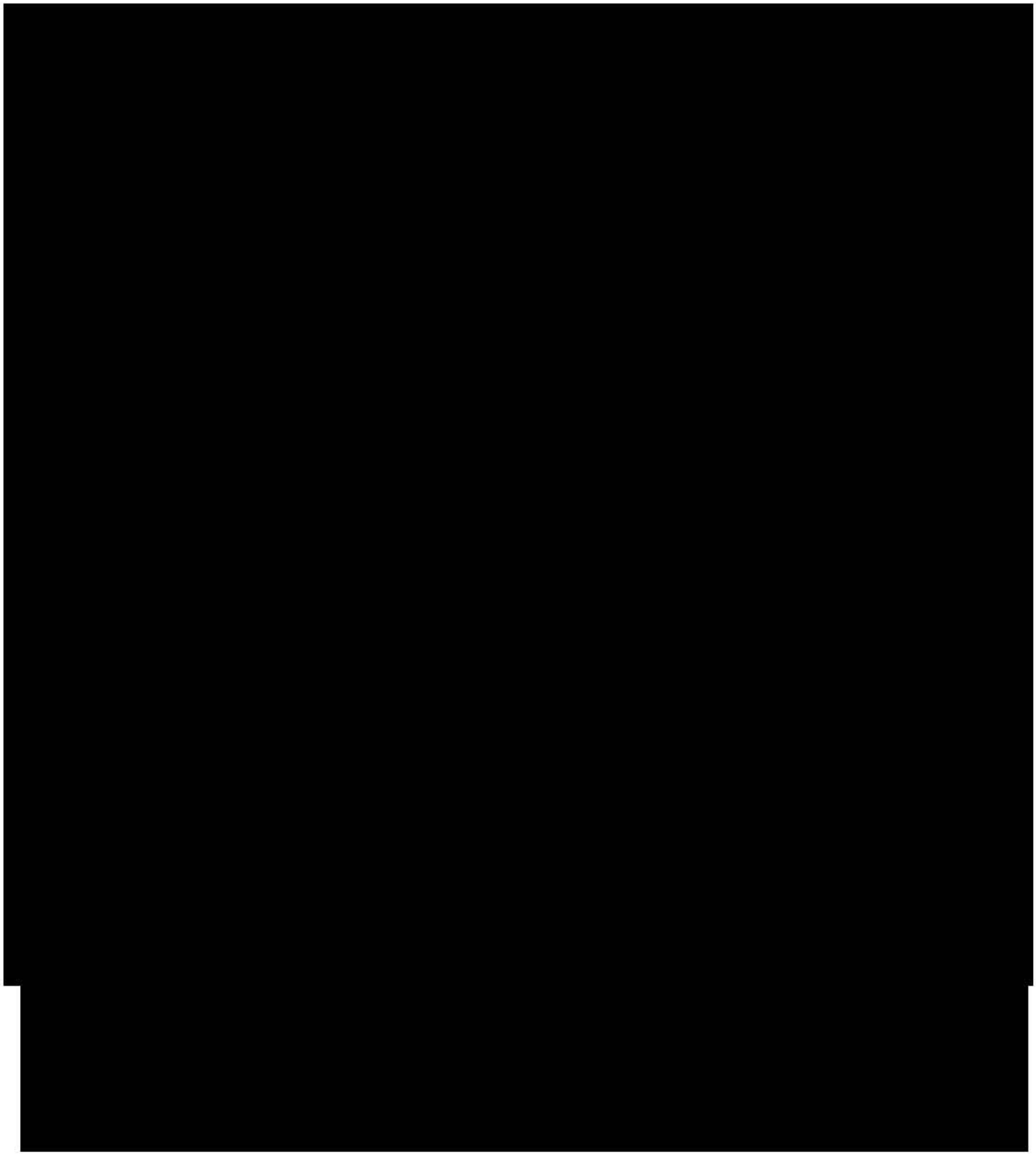

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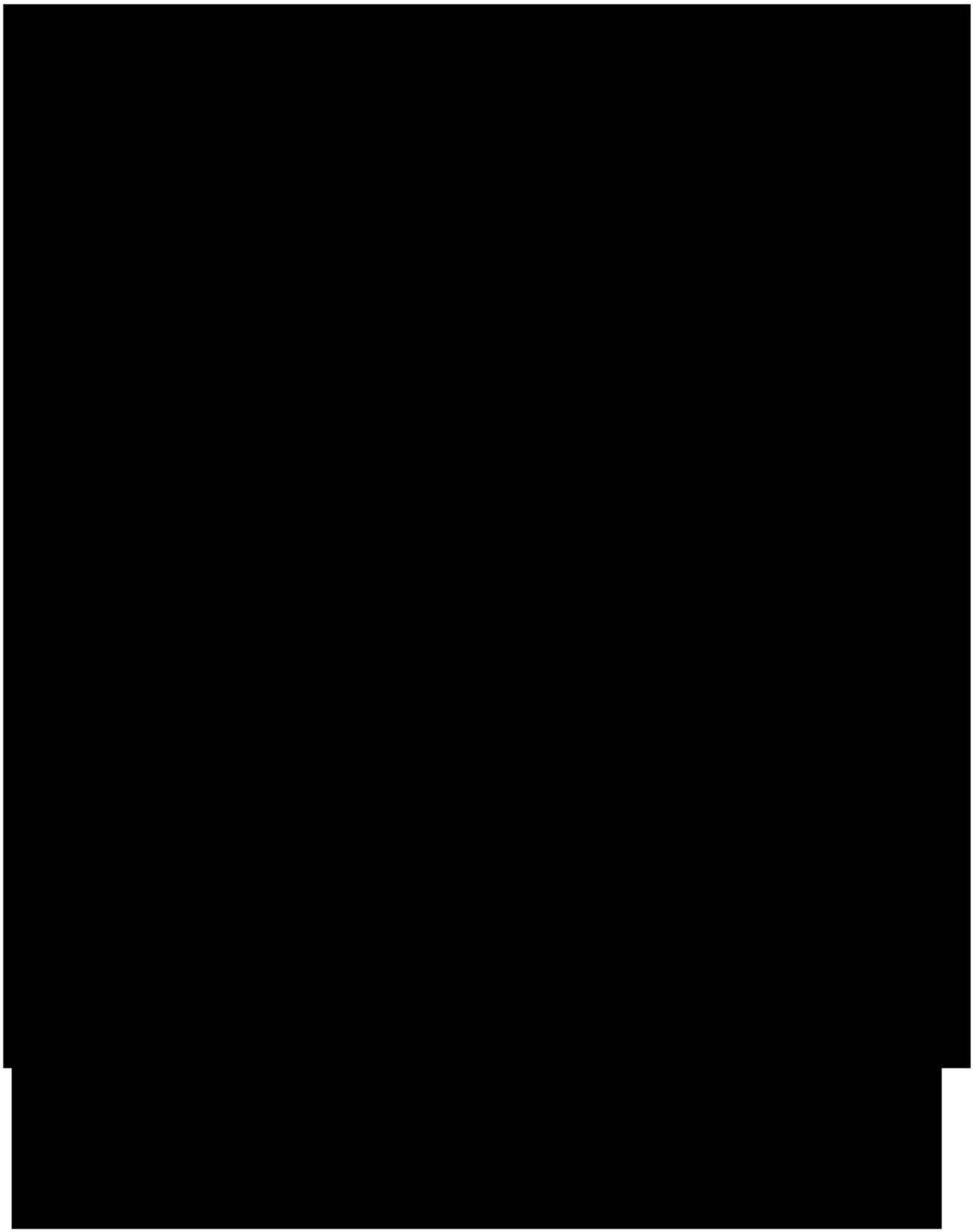

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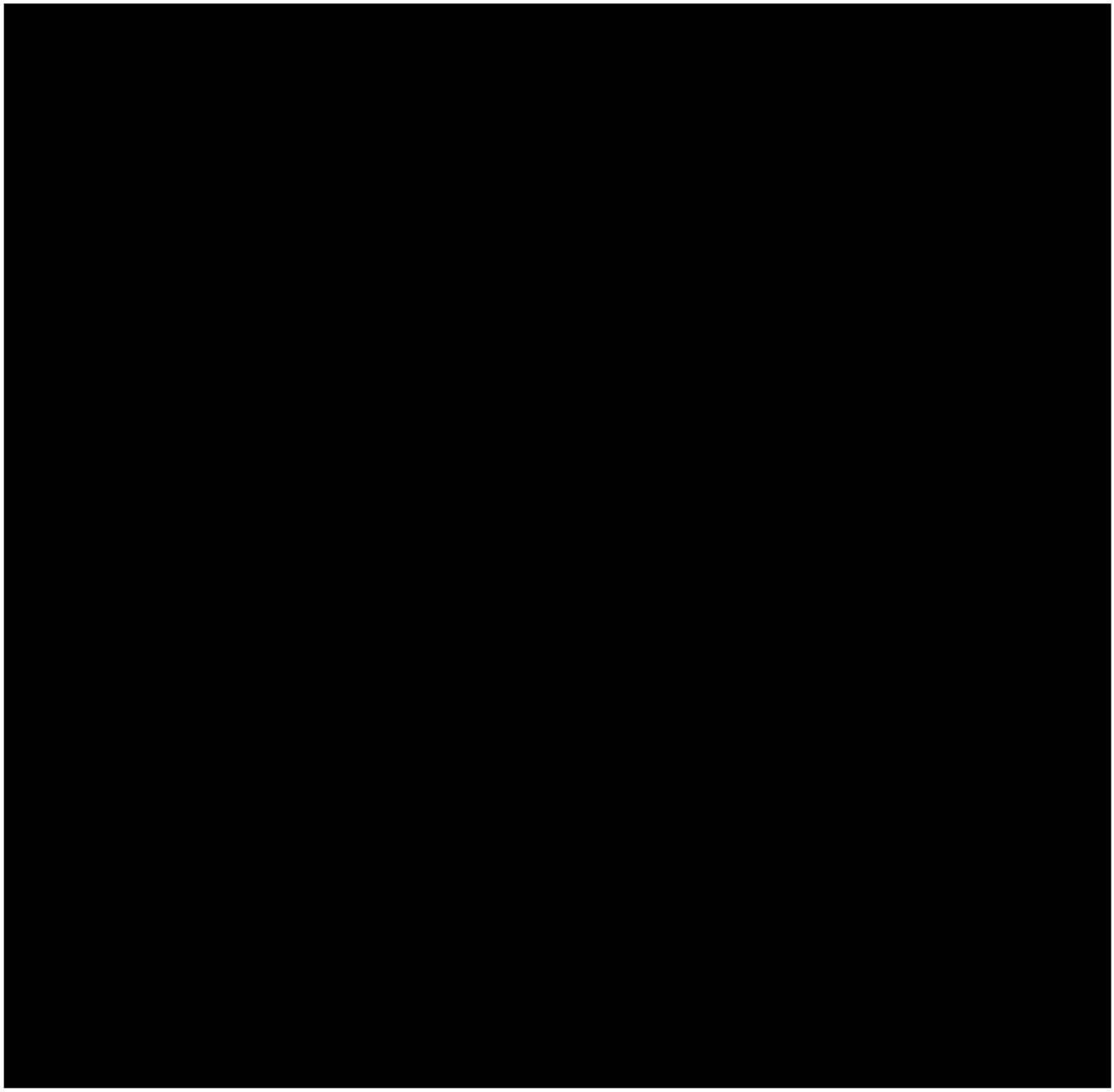

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